

Academic Programs \& Policies
$2024-2025$

## 2024-2025 ACADEMIC CALENDAR

Fall Semester 2024

Full Session \& Fall A-Term Classes Begin
Labor Day
Fall 12 Week Session Begins
Fall A-Term Session Ends
Fall B-Term Session Begins
Veterans' Day Holiday
Thanksgiving Holiday
Full Session, 12 Week and Fall B-Term
Classes End
Winter Holiday

New Year's Day Holiday

## Spring Semester 2025

Full Session \& Spring A-Term Classes
Begin
Martin Luther King Holiday
Spring 12 Week Session Begins
Spring A-Term Session Ends
Spring Break
Spring B-Term Session Begins
Commencement
Full Session, 12 Week and Spring B-Term
Classes End

Summer Semester 2025
Full Session \& Summer A-Term Begin
Memorial Day Holiday
Summer B-Term Session Begins
Juneteenth Holiday
Independence Day Holiday
Summer A-Term Session Ends
Full Session and B Term Classes End

August 26 (Mon)
September 02 (Mon)
September 23 (Mon)
October 20 (Sun)
October 21 (Mon)
November 11 (Mon)
November 28-29
(Thurs-Fri)
December 15 (Sun)
December 23-27
(Mon-Fri)
January 01,2025
(Wed)

January 13 (Mon)
January 20 (Mon)
February 03 (Mon)
March 09 (Sun)
March 10-16 (MonSun)
March 17 (Mon)
May 09 (Fri)
May 11 (Sun)

NOTE: Sinclair Community College reserves the right to make changes to the published schedule.

## SinclairOnline

## FlexPace Courses \& Programs

Sinclair FlexPace allows motivated students to complete online courses flexibly. FlexPace courses and programs offer students a faster path to graduation through competency-based learning, where pacing is personalized, and prior knowledge affords accelerated completion.

## To register for FlexPace courses, students are required to:

1. Complete the FlexPace Orientation in eLearn
2. Complete the How to Succeed in eLearn tutorial
3. Have a 3.0 GPA - students who do not have a 3.0 GPA can contact a FlexPace Success Coach at FlexPace@sinclair.edu for registration options
FlexPace Courses have course progress and grading requirements:

- Course Progress - students must complete at least one graded assignment within the first 7 days of the FlexPace course to establish attendance and must regularly make progress in the course.
- Grading - student must pass each graded assignment in a FlexPace course with a score of $80 \%$ or higher unless otherwise noted in the course.
For more information and a list of current Sinclair FlexPace courses and programs visit the FlexPace website or contact
flexpace@sinclair.edu. Note: Sinclair FlexPace courses are open to all students who complete the FlexPace Orientation in eLearn and meet GPA requirements.


## Online Courses and Programs

SinclairOnline offers a variety of online programs and more than 300 online courses. Course content is the same as in-person courses and meets all program and transfer requirements. For more information about SinclairOnline courses, certificates and degrees, visit:
www.sinclair.edu/online or contact us toll free at: (888) 226-2457.

## Online Registration Policies

Sinclair offers a variety of online programs and more than 300 online courses. Course content is the same as face-to-face courses and meets all program and transfer requirements.

## To register for online courses, students are required to:

1. Complete the How to Succeed in eLearn tutorial
2. Current or returning students must have a 2.0 GPA - students who do not have a 2.0 GPA can contact Academic Advising for registration options
3. Students may register for an online course up to midnight of the second day of the term
For more information about Sinclair's online courses, certificates, and degrees visit the SinclairOnline website or contact Sinclair toll free at 888-226-2457.

## Online Testing Information \& Academic Integrity

The Academic Integrity Policy addresses willful acts of cheating, dishonesty, and plagiarism and establishes common procedures to be followed when such acts occur. The intent of the Academic Integrity Policy is to improve students' understanding of academic integrity while affirming the concepts and philosophies established in the Sinclair Community College Honor Code.

To support the implementation of academic integrity of students' work, some proctored (supervised) testing may be required in some courses.

Some courses at Sinclair demand in-person testing or online proctored testing that may require a student to purchase or download additional software and/or hardware. Such testing requirements will be noted in the Registration Portal and the course syllabus. Students are strongly encouraged to read course descriptions and syllabi thoroughly to determine any testing requirements before registering.

More information is available at Sinclair's Testing Center website.

## Apply for Financial Aid

Complete the Free Application for Federal Student Aid (FAFSA) each year by visiting StudentAid.gov. Students submitting a FAFSA for the first time or who last applied before May 2015 must create a StudentAid.gov account. The StudentAid.gov account is used every year to electronically submit the FAFSA. Financial aid offers are determined using the information provided on the FAFSA.

The following documents are needed from FAFSA Contributors to complete the 2024-2025 FAFSA:

## Dependent Students:

- Student's 2022 IRS Form 1040, including all schedules
- Student's 2022 W2(s)
- Student's social security number, driver's license/state ID number
- Student's StudentAid.gov username and password (if FAFSA previously completed)
- Parent(s)/Stepparent 2022 IRS Form 1040, including all schedules
- Parent(s)/Stepparent 2022 W2s
- Parent(s)/Stepparent 2022 Child Support received
- Parent(s)/Stepparent social security number(s), birth date(s), marital status, and date of status
- Parent(s)/Stepparent StudentAid.gov username and password (if FAFSA previously completed)
- Both parent/stepparents will need to have StudentAid.gov usernames and passwords if they filed separate tax returns. This is true even if the parents are not married but living together.
For guidelines to help determine whose information should be reported, go to Who is My Parent? When I Fill Out the FAFSA Form?


## Independent Students:

- Student/Spouse (if married as of today) 2022 IRS Form 1040, including all schedules
- Student/Spouse (if married as of today) 2022 W2s
- Student/Spouse (if married as of today) 2022 Child Support received
- Spouse social security number, birth date, marital status, and date of status
- Spouse StudentAid.gov username and password if the tax return was filed separate from student


## Am I an Independent or Dependent Student?

Your answers to questions on the FAFSA form determine whether you are considered a dependent or independent student. If you answer yes
to one or more of the following questions, you are independent. If you answer no to all of the following questions, you are dependent.

- Were you born before January 1,2001 ?
- As of today, are you married? (answer No if you are separated)
- For 2024-2025, will you be working on a masterâ $\epsilon^{\mathrm{TM}_{S}}$ or doctorate degree?
- Are you currently serving on active duty in the U.S. armed forces for purposes other than training?
- Are you a veteran of the U.S. armed forces?
- Do you have children or other people who live with you (other than spouse) for whom you provide more than $50 \%$ support now and between July 1, 2024, and June 30, 2025?
- At any time since you turned 13 , were you an orphan?
- At any time since you turned 13 , were you a ward of the court?
- At any time since you turned 13 , were you in foster care?
- Are you a legally emancipated minor as determined by a court in your state of residence?
- Are you in legal guardianship (not custody) with someone other than your parent as determined by a court in your state of residence?
- At any time on or after July 1, 2023, were you unaccompanied and either (1) homeless or (2) self-supporting and at risk of being homeless?
If an unusual circumstance prevents a Dependent Student from providing contributor information for a parent/stepparent, the student can be considered provisionally independent. To complete this process and move to fully independent, the student must complete the Unusual Circumstance Appeal Form available through the FA Online Forms Portal. A financial aid administrator will make a documented determination of independence after reviewing the unusual circumstance documentation submitted.

When should I apply? Apply as early as possible each year. The FAFSA is usually available on October 1 for the following academic year. May 1 is the annual priority date established by Sinclair. If students submit the FAFSA after the priority date, they may be required to pay up-front for tuition and books. If students receive a financial aid offer after they have paid tuition, Sinclair can arrange for students to be reimbursed up to the amount of the offer that is disbursed to the students' accounts.

Some scholarships will require additional applications. Scholarship applications are available online at www.sinclair.edu/scholarships. The dates for these applications are as follows:

- Fall Term scholarship applications are available from June 1 to June 30
- Spring Term scholarship applications are available from November 1 to November 30
- Summer Term scholarship applications are available from March 1 to March 31
The financial aid process can take four to six weeks to complete, depending on individual circumstances and the student's response to Sinclair's request for verification documents. Please plan accordingly.

Communication with Financial Aid \& Scholarships Office

The Financial Aid \& Scholarships office at Sinclair helps students meet their educational expenses. Sinclair will make every effort to help students meet the difference between college costs and the amount the family is able to pay. All aid offers are made on a non-discriminatory basis.

1. The Financial Aid \& Scholarships office communicates with students about their FAFSA application status through their Sinclair.edu student email account. When the student's financial aid offer has been determined, an aid offer notification will be sent via email. Students should check their sinclair.edu email and Financial Aid Portal information regularly.
2. Questions? For information, call, write, or personally visit the office:

- Call Sinclair's Welcome Center: (937) 512-3000 or (800) 315-3000
- Email welcomecenter@sinclair.edu from student's Si nclair.edu email account.
- Send a letter to: Financial Aid \& Scholarships, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460.
- Visit the Dayton Campus Welcome Center, Building 10, First Floor, to speak with a Welcome Center representative.
- Students can also visit a Sinclair regional location for assistance.
Note: No information regarding student's financial aid records will be provided to anyone but the student without the student's written permission. See a financial aid representative at any campus location to complete the Authorization for the Release of Student Information (FERPA Release).

Federal Financial Aid

|  |  |  |  | ***Federal |  |  | Parents may borrow up to the Cost of Att less any other aid |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { NAME OF } \\ & \text { AID } \end{aligned}$ | TYPE OF AID | COLLEGE EXPENSES COVERED | ANNUAL LIMITS | Parent PL <br> Loan <br> (Dependent <br> Students |  | Tuition; fees; books; educational expenses |  |
| Federal Pell <br> Grant | Grant | Tuition; fees; books; educational expenses | Maximum of have a bach¢lor's or |  |  |  | tonly up to 12 full-time semesters <br> ndent - $\$ 31,000$ with no more |
|  |  |  | \$7,395 award amount based on need and defe using SAI (Student Aid Index) | atmindent or the equiv ** Lifetime |  | qree Pell Gra lifetime <br> $n$ Limits: Dep |  |
| Federal <br> Supplemental <br> Educational <br> Opportunity <br> Grant <br> (FSEOG) | Grant | Tuition; fees; books; educational expenses | $\begin{array}{lc}\text { Limits based on availability of funds } & \text { th } \\ & * \\ & \text { an } \\ & \text { deci } \\ & a n \\ & e n \\ & \\ & \end{array}$ | than \$23,08 $\$ 23,000$ in 1 ad Depend an due to de decision ma ans. Paren endorser. applicants | Stuide <br> fatde <br> advan <br> dente <br> theiga <br> ay be <br> NIME <br> Speded <br> who | 7790t Indepe <br> elor's or gree orhapse par <br> e for additio <br>  Gredheling $i$ dverse credit | dent - $\$ 57,500$ with no more than <br> ts are unable to obtain a PLUS Lo <br> l Federal Direct Unsubsidized Lo in a credit worthy required for qualifying PLUS loan istory as defined by the regulatio |
| Federal Work Study | Work | Educational expenses | Award amount based on need and determined Sinclair Financial Aid after reviewing other ${ }_{A}$ student received |  |  | least <br> ${ }^{\text {ral }}$ aid are active are availa ices/welco | ct to federal aid guidelines. The |

All federal loans must be repaid. Repayment begins six (6) months after a student's enrollment drops below six (6) credit hours, including students attending part-time, graduating, and withdrawing. Additional information regarding loan repayment and required exit counseling is available at: www.sinclair.edu/services/welcome-center/finaid

Important Note: Federal Aid received at another institution may affect the amount of aid a student is eligible for at Sinclair and it is the responsibility of the student to only accept aid for which he or she is eligible with regard to annual limits. Students should contact the Financial Aid \& Scholarships office with any questions concerning aid amounts and eligibility.

## Financial Aid Add/Drop Census Date Policy-Dropping, Adding, or Withdrawing from Courses

Typically, the initial calculation of Federal Pell Grants are prepared based on anticipated full-time enrollment each term. Sinclair recalculates Federal Pell Grant awards based on attendance and/or schedule adjustments up to the student census date. After the student census date, a student's Federal Pell Grant will not be adjusted for drops or adds even if the student has been attending class. However, if the student fails to complete all of his or her scheduled courses in the term, a Return of Title IV Funds calculation is required, and an adjustment may be made by Sinclair.

Federal Pell Grant awards will be based on the number of credit hours in which a student is enrolled as of the student census date. If a student withdraws from or drops all of his or her courses on the same date, then the student census date will be the latest census date for the course(s) they dropped with record. Students are strongly encouraged to finalize their course schedule no later than the start of the term.

| DEFINITIONS |  |
| :--- | :--- |
| Add | A course added by the student to his or her schedule. |
| Drop | A course dropped by the student from his or her <br> schedule on or before the course census date. No grade <br> will be issued for the dropped course. The course will <br> not be part of the student's academic record (a drop <br> without record). |
| Withdrawal | A course dropped by the student from his or her <br> schedule after the course census date. A grade of "W" <br> (withdrawal) will be issued for the course. The course <br> will be part of the student's academic record (a drop <br> with record). |
| Purged | The process used by the school to remove courses from <br> a student's schedule for nonpayment of tuition and fees. |
| Cancelled | A course removed by the school due to cancellation <br> (e.g., due to low course enrollment) |
| Course |  |
| Census Date | The last date to add a course or drop a course with the <br> possibility of a refund and without record. See the |


|  | Sinclair Community College Registration Calendar for <br> specific dates for a given academic year. |  |
| :--- | :--- | :--- |
|  | The latest course census date for all of the student's <br> registered courses for a specific term. For example, in <br> the Fall term a student has a full-term course (census <br> date is Aug. 31), an A term course (census date is Aug. <br> 28), and a B term course (census date is October 23 <br> which is the latest starting course). The student census <br> date is October 23. All adds or drops that occur on or <br> before October 23, will be considered when <br> determining the student's enrollment level and the <br> amount of federal financial aid the student will receive. |  |
| Student <br> Census Date |  |  |
|  | Level | Credit Hours |
|  | Full Time | 12 or more |
|  | Three-Quarter Time | $9-11$ |
|  | Half-Time | $6-8$ |
|  | Less Than Half-Time | $1-5$ |
|  |  |  |

Credit Hours Included or Not Included in Determining Enrollment Levels for Federal Financial Aid

| Pell Grant |  |  |  | Federal Loans |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student <br> Enrollment <br> Activity | Before <br> Course <br> Census <br> Date | After Course Census Date but Before Student Census | After <br> Student <br> Census <br> Date | Before Loan <br> Disbursed to <br> Student <br> Account | After <br> Loan <br> Disbursed <br> to Student <br> Account |
| Add | Included | Included | Not <br> Included | Disbursement allowed if at least 6 Title IV credit hours | NA - if the activity occurred after the federal loan was disbursed, no adjustment is made. |
| Drop without record (Drop) | Not <br> Included | NA - <br> cannot <br> drop <br> without <br> record <br> after the <br> course | NA - <br> cannot drop without record after the course | Disbursement allowed if at least 6 Title IV credit hours after excluding the | NA - if the activity occurred after the federal loan was disbursed, |


|  |  | census <br> date | census <br> date | dropped hours. | no <br> adjustment is made. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Drop with record <br> (Withdrawal) | NA - <br> cannot <br> drop <br> with <br> record <br> before <br> the <br> course <br> census <br> date | Not Included | Included | Disbursement allowed if at least 6 Title IV credit hours after excluding the dropped hours. | NA - if the activity occurred after the federal loan was disbursed, no adjustment is made. |
| Purged | Not <br> Included | Not Included | Included | Disbursement allowed if at least 6 Title IV credit hours after excluding the dropped hours. | NA - if the activity occurred after the federal loan was disbursed, no adjustment is made. |

## Financial Aid Repeat Coursework Policy

Students may receive federal financial aid funding for one (1) repetition of a course successfully completed. The repeated class may be counted towards a student's enrollment status and the student may be awarded Title IV aid for the enrollment status based on the inclusion of the class.

Grades of A, B, C, D, Y, P and S are considered course credit hours successfully completed. Grades of W, F, U, I, IP, N and Z are considered course credit hours not successfully completed.

Students should be aware that for Satisfactory Academic Progress, all coursework attempted counts toward GPA, PACE of completion and maximum timeframe hours used to determine eligibility for federal financial aid. To see the Satisfactory Academic Progress Policy, you mayvisit: www.sinclair.edu/satisfactory-academic-progress.

Students taking repeated courses should consult with the Financial Aid \& Scholarships office prior to registration to ensure repeated courses are counted appropriately for financial aid eligibility. In addition, a student may need to provide documentation from the department chairperson of their valid active program regarding the need to repeat courses.

A possible exception exists for coursework with the same department name, course number and title but whose content varies by term and is required to complete the student's current active program. All exceptions will require the student to complete and submit a Repeat Coursework Appeal, which is available online at www.sinclair.edu/finaid or any Sinclair location.

Examples of repeated coursework include the following scenarios:

- A student is enrolled in 12 credit hours which includes a 3 credit hour course that the student passed and is repeating. The student withdraws from the course before the last day to withdraw with a full refund (withdrawals without record). The next term, the student is again registered for 12 credit hours and repeats the same 3 credit course. Twelve credits will count for financial aid eligibility.
- A student is enrolled in 15 credit hours, which includes a 3 credit hour course that the student previously passed and is repeating. The student is enrolled in a minimum of 12 credit hours which are not repeats, therefore, student's financial aid eligibility will not be impacted by the repeated course.
- A student is enrolled in 15 credit hours which includes 3 credits repeating a course not yet passed. Since the student has never passed the course, the student's financial aid eligibility is not impacted by the repeat.
- A student is registered for 12 credit hours which includes a 3 credit hour course that have been previously taken two times with grades of D and F respectively. Since the student has already taken the course one time since it was passed, he cannot receive federal aid for the second repeat of the course even though an F was earned. Only 9 credits will count for financial aid eligibility.


## Financial Aid Student Attendance Policy

Federal regulations require that the Financial Aid \& Scholarships office establish an attendance policy to govern a student's eligibility to receive federal student aid for a given semester. The Sinclair policy requires the Financial Aid \& Scholarships office to verify that students establish attendance through academic engagement during the first 14 days of the following terms to receive federal financial aid:

- Full Term
- A Term
- 12 Week Term
- B Term

Attendance is verified for flex sections by the final grade earned for that course. Flex sections are defined as sections that are not full-term, A, B, or the 12 -Week term. Unearned grades are a grade of " $Z$ " which equates to a student never attending, "W", and a "U" or "F" with a last date of attendance.

Sinclair allows instructors to establish an academic attendance policy for each course they teach, which may be different from the Financial Aid Student Attendance Policy. Federal student aid is based on the Financial Aid Student Attendance Policy even if the academic attendance policy reports a different result.

Federal Pell Grant and Federal SEOG must be adjusted for students who have not established attendance in all courses through the first 14 days of the class, or in accordance with the provision for extenuating circumstances described below. Federal Direct Loans may be adjusted for students who have not established attendance in one or more classes. Per federal regulations, Direct Loans must be removed completely if students do not establish attendance in at least one class. Students reported as non-attending are typically not withdrawn from the course.

There are exceptions to the Financial Aid Student Attendance Policy because of directives from outside entities.

The Ohio Department of Rehabilitation and Corrections (ODRC) requires attendance to be taken for all Prison Education Programs (PEP). Our current policy determines that attendance must be established within 14 days of the first day of class. Per the ODRC policy, we will extend this timeframe to 15 days for all PEP programs. If the student does not begin attendance in all registered classes, the Pell Grant must be recalculated based on the student's revised enrollment status.

The Ohio Peace Officer Training Commission (OPOTA) also requires attendance to be taken for the Criminal Justice Training/Police Academy. There are no issues with our current policy that attendance must be established within 14 days of the start of class.

The Financial Aid \& Scholarships office must be notified as soon as possible by representatives from the Advanced Job Training Office (AJT) for PEP programs and from the Criminal Justice Department for the Police Academy if a student stops attending, but no later than 14 days after the student's last date of attendance. There are limited exceptions to the 14-day rule such as a natural disaster or the instructor has an unusual circumstance that kept them from taking and reporting attendance within a timely manner. Per Volume 5 of the Federal Student Aid Handbook, the school is expected to have determined whether the student intends to return to classes or to withdraw after 14 days. If the student is eventually determined to have withdrawn, the end of the 14-day period begins the timeframe for completing a Return of Title IV (R2T4) calculation.

## Academic Engagement

Academic Engagement includes but is not limited to:

- Physically attending a class where there is an opportunity for direct interaction between the instructor and students
- Submitting an academic assignment
- Taking an exam, an interactive tutorial, or computer-assisted instruction
- Attending a study group assigned by the school
- Participating in an online discussion about academic matters and
- Initiating contact with a faculty member to ask a question about the academic subject studied in the course.
The definition of academic engagement does not include activities where a student may be present, but not academically engaged, such as:
- Participating in a student-organized study group
- Logging into an online class without active participation or
- Participating in academic counseling or advising.

A student's self-certification alone is not sufficient documentation of attendance in an academically related activity; it must be supported by institutional documentation of the student's attendance in the activity.

## Attendance Reporting Change Request (Attendance Appeal)

If a student was reported as non-attending in error, it is the student's responsibility to request their instructor to submit an electronic attendance appeal to the Financial Aid \& Scholarships office. In a case
where the student attended the wrong section of a class, the instructor with whom the student established attendance must submit an attendance appeal form with the date the student established attendance in his/her section. The instructor of the correct section must also submit an attendance appeal with the date the student established attendance in his/her section. The electronic appeal form is available to instructors on Forms Central, accessed through the Sinclair portal.

## Students Who Attended Within the First 14 Days of the Course

The instructor submits the appeal with the first date the student attended the course. The Financial Aid \& Scholarships office reviews the student's financial aid award based on the date the instructor reported the student first attended the course.

## Students Who Did Not Attend Within the First 14 Days of the Course Due to Extenuating Circumstances

The instructor submits the appeal with the first date the student attended the course and enters a brief explanation of his/her knowledge of the student's circumstance. The Financial Aid \& Scholarships office notifies the student of the next steps via Sinclair email (See Extenuating Circumstances section for examples of acceptable documentation).

## Extenuating Circumstances

The Financial Aid \& Scholarships office considers the following extenuating circumstances to allow students to establish attendance after the 14th day of the course. The documentation provided must correspond to the attendance taking period for which the student is submitting the appeal:

- Severe illness preventing him or her from attending all classes during the first 14 days of the course and he or she provided documentation from a medical doctor or hospital, and a financial aid staff member agrees that attendance in the first 14 days of the course was not possible, or;
- Death of a close family member and provides a copy of the death certificate or obituary referencing the student's name in relationship to the deceased, or;
- Campus closure (inclement weather or an act of God) causing the student to miss classes, and in addition, the student documents the extenuating circumstances preventing him or her from establishing attendance during the remainder of the 14 day period, or;
- Attended the wrong section of the course or changed sections but established attendance during the first 14 days of the course in that section as evidenced by the instructor for that course, even though the student was not registered in that course at the time attendance was verified, or;
- The instructor ceased teaching the course or is no longer available to submit the attendance appeal form (for example due to death, medical illness or disability, relocating out of state, etc.) and the student has been regularly attending the courses, or;
- Other documented extenuating circumstances that a financial aid staff member determines through the use of professional judgment.


## Technology Errors

If a technical error occurs during the attendance reporting submission or college error prevented accurate attendance reporting, attendance verification may be updated without an attendance appeal if the instructor provides the course roster and documentation of the error to the Financial Aid \& Scholarships office. The director of Financial Aid \& Scholarships determines if an attendance appeal exception can be approved.

## Attendance Reporting Change Request Review Timeline

Attendance Reporting Change Request decisions can take up to 10 business days. Students are notified of the request decision through their Sinclair.edu email account. All request decisions are final. Attendance Reporting Change Requests for Fall and Spring Semesters must be submitted within 30 days after the end of the term for which they are appealing. Attendance Reporting Change Request for Summer must be submitted within 15 days after the semester ends. Any appeals received after the deadline for each semester will be reviewed by a Financial Aid Manager on a case-by-case basis. Note: Processing deadlines may impact Federal Direct Loan eligibility for students with requests approved after the semester ends. Contact the Financial Aid \& Scholarships office for more information.

## Reporting Earned Grades

Students who earned grades in a course previously reported by the instructor as non-attending may contact the Financial Aid \& Scholarships office within 30 days after the semester ends to review federal aid eligibility for the completed course. Students may report grades earned for courses completed during Summer Semester to the Financial Aid \& Scholarships office within 15 days after the semester ends. In some cases, attendance may be updated through other Financial Aid Processes such as Return to Title IV or Packaging if conflicting information exists. Any requests received after the deadline for each semester will be reviewed by a Financial Aid Manager on a case-by-case basis. Note: Processing deadlines may impact Federal Direct Loan eligibility for students with requests approved after the semester ends. Contact the Financial Aid \& Scholarships office for more information.

Note: Where days are addressed, Financial Aid \& Scholarships office uses calendar days.

## Remedial Coursework Policy

Remedial coursework prepares a student for study at the postsecondary level. According to Federal regulations, a student may receive Federal financial aid for up to 30 credit hours of remedial coursework. Remedial coursework includes most DEV (with the exception of those listed below), ACA, BIT, and EXL courses. Remedial coursework also includes prerequisite courses that are not required for a student's program of study, for example MAT 0200. A course will be excluded from the determination of a student's Federal financial aid if the total remedial credit hours, with the course included, exceeds 30 credit hours.

Remedial coursework content must be at least high school level. If a remedial course's content is below the high school level, the course cannot be included to determine federal financial aid eligibility, and will not count toward the 30 credit hour remedial coursework limit
because it does not meet the definition of remedial. At Sinclair, MAT 0050 is the only course that does not meet content standards.

## Results of Financial Aid Application

If eligible for federal financial aid, Financial Aid Offers are sent to the student Sinclair.edu email account beginning in the spring for courses starting Fall 2024. The following offers must be accepted before funds will be available:

- Federal Direct Loans
- Federal Work Study

Visit your Financial Aid Portal to review your offers. If you believe the offer does not fully represent your current financial situation, you can request an appointment with a Financial Aid \& Scholarships representative to discuss your options. For information about how to schedule an appointment or for any additional questions, email finaid@sinclair.edu.

If your financial aid package includes Federal Direct Loans, you may accept or decline them on the Financial Aid Portal. The amount you have been offered may not be your full eligibility per the annual loan limit regulations. To view annual limits, go to SinclairÃçâ, $\neg \mathrm{a}, \notin s$ Federal Direct Loan webpage. It is possible to request more loan funds at the time that you accept the loan, but it will be reviewed by a Financial Aid \& Scholarship representative to ensure you are eligible. You can also request additional loan funds at a later time by completing a Change of Award Form on the FA Online Forms Portal. If you accept loans, visit StudentAid.gov to complete your loan requirements listed below:

- Loan Agreement (Master Promissory Note MPN)
- Entrance Counseling

New student loan borrowers must complete Entrance Counseling before receiving a Federal Direct Loan. New student and parent Federal Direct Loan borrowers must complete a Loan Agreement (MPN) prior to receiving a Federal Direct Loan, which is valid for 10 years. Firstyear (less than 30 credit hours), first-time borrowers are subject to a 30 day waiting period after the start of the semester, before their loans will be disbursed

Payment of Aid: Students' financial aid will first be credited toward payment of tuition and fees, and then for books or other educationally related expenses. Look for the amount of aid on your term statement after you have registered for classes each term. Any federal funds over and above tuition, fees, and books, will be refunded to the student. For Parent PLUS Loans, the parent will receive the refund unless they indicate the refund can be sent to the student. Be sure to set up your BankMobile preference for receiving refunds via direct deposit or a check mailed to the address on file with Sinclair. For more information refunds, review the Refund Policy on the Bursar webpage.

## Satisfactory Academic Progress (SAP) Policy

## Process Overview and Responsibilities

Federal regulations require students receiving federal student financial aid to maintain satisfactory academic progress (SAP) toward the completion of a federal aid eligible program. The following sources of federal student aid may be awarded, if a student qualifies:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work Study
- Federal Direct Loan (subsidized and unsubsidized)
- Federal Direct PLUS Loan (parents of dependent students only)
The Financial Aid SAP Policy evaluates qualitative and quantitative components to determine federal financial aid eligibility at the end of each semester. Failure to meet both requirements results in financial aid warning status for the following semester of enrollment, if the SAP status was satisfactory in the prior semester of enrollment. If the student does not meet the SAP requirements after the warning semester, federal aid is suspended for subsequent semesters. The student may appeal for reconsideration if an extenuating circumstance prevented successful completion of the semesters in which the requirements were not met.

The Financial Aid SAP Policy applies consistently to all categories of students who have a FAFSA on file, regardless of enrollment status, program of study, or any other category of student.

## "Same as or Stricter" than Requirement

Sinclair's Financial Aid SAP Policy and Academic Progress Policy each require students maintain a cumulative Grade Point Average (GPA) greater than or equal to 2.0. The Academic Progress Policy applies to all students, including non-federal financial aid recipients, to ensure students meet the required 2.0 graduation requirement upon program completion.

The Financial Aid SAP Policy evaluates quantitative measures (pace of completion and maximum timeframe) to ensure students can graduate within the maximum number of credit hours required for their program of study. The Academic Progress Policy does not evaluate quantitative measures to determine satisfactory academic progress. Additionally, the Financial Aid SAP Policy imposes stricter consequences for failing to meet the requirements (see below). Therefore, the Financial Aid SAP Policy is stricter than the Academic Progress Policy.

| Evaluation <br> Period | GPA <br> Requirement | Financial <br> Aid SAP <br> Policy | Federal <br> Aid <br> Eligible | Academic <br> Progress <br> Policy | Academic <br> Eligible <br> to Enroll |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Semester 1 | $>=2.0$ | Warning | Yes | Academic <br> Intervention | Yes |
| Semester 2 | $>=2.0$ |  |  | Academic <br> Probation | Yes |
| Semester 3 | $>=2.0$ | Suspended | No |  | Academic <br> Dismissal |
|  |  |  | No |  |  |

## Qualitative Measure

Students must maintain a fixed, cumulative GPA of at least 2.0 when the SAP evaluation is completed after each semester of enrollment. The financial aid GPA is computed by dividing the total number of grade points by the total credit hours in which grades were earned at

Sinclair. The GPA calculation is based on grades reported by faculty to the Registration \& Student Records office. Financial Aid staff initiate the SAP evaluation each semester, which systematically determines if the GPA requirement is met.

## Quantitative Measure

Pace of Completion (Pace) is the quantitative measures used to evaluate students' progress through their program of study.

The Pace component requires students to receive a passing grade in $66.67 \%$ of the total credit hours attempted to ensure students will complete within the maximum timeframe established for their program. The Pace component is evaluated at the end of each semester by dividing the total number of completed credit hours by the total number of attempted credit hours. The Pace component evaluates the percentage, not the number, of successfully completed classes, which allows students flexibility in their enrollment statuses.

## Maximum Timeframe Requirement

The MTF component requires students to complete their active program of study within $150 \%$ of the published program credit hours. Maximum Timeframe is calculated by multiplying the published program credit hours by $150 \%$. Students with unsatisfactory SAP status due to maximum timeframe are ineligible for financial aid warning, although financial aid probation status may be assigned if the student successfully appeals.

## Pace

Students must receive a passing grade in $66.67 \%$ of the total credit hours attempted to ensure program completion within $150 \%$ of the published program credit hours (MTF). The Pace component is evaluated at the end of each semester by dividing the completed credit hours by the total number of attempted credit hours. The Pace component evaluates the percentage, not the number, of successfully completed classes, which allows students flexibility in their enrollment statuses.

## Frequency of Evaluation

The Financial Aid SAP Standards are evaluated at the end of each payment period (Fall, Spring, and Summer Semesters) for students who were enrolled for the semester and for whom Sinclair has received a FAFSA.

Note: An intersession course is combined with the following payment period. Credit hours attempted during intersessions are included in following payment period's SAP evaluation.

Students may be reviewed outside of the evaluation period on a case-by-case basis as determined by a Financial Aid Officer or Manager. Students will also be reviewed when a FAFSA is received to determine if they are meeting the SAP Standards prior to federal aid disbursing for the first time.

Students on financial aid probation and identified as not meeting academic plan requirements before the end of semester evaluation are notified of their option to appeal. Any such evaluation does not replace
the official end of term evaluation completed for all applicable students.

## SAP Status Notification

Students are emailed when their financial aid eligibility has changed due to the end of term SAP review. The notification is sent via Sinclair.edu email by the Friday after the last date of the semester.

## Financial Aid Warning

Financial Aid Warning status is assigned for one semester of enrollment following an unsuccessful GPA and/or Pace evaluation. This status may be assigned if a student's prior SAP status was Financial Aid Satisfactory (or its equivalent).

The student must meet the minimum cumulative GPA and Pace requirements at the evaluation for the warning semester to continue federal financial aid eligibility. If the requirements are not met, the student's federal financial aid is denied until regaining eligibility by meeting the requirements through completed coursework, or by successfully appealing for reconsideration of federal financial aid eligibility.

There is no limit to the number of times a student may be placed on a Financial Aid Warning status. However, no Financial Aid Warning status may be assigned to consecutive terms of enrollment, i.e., the student must be in a Financial Aid Satisfactory status (or its equivalent) the term prior to being assigned to a Financial Aid Warning status.

There is no Financial Aid Warning status for MTF status. Students receive an alert when 24 credit hours of eligibility remain and again when 12 credit hours remain for maximum credit hours attempted.

## SAP Appeal Process

Students may appeal federal financial aid suspension if extenuating circumstances prevented academic progress during the semester(s) of unsatisfactory SAP status. Students who are not meeting SAP after the end of term evaluation are notified of their financial aid suspension and the appeal process via their Sinclair.edu email.

The SAP appeal must be submitted to the Financial Aid \& Scholarships office for review by the SAP Review Committee. If the student is enrolled and wants to have the appeal considered for the current payment period, the appeal must be received by the B term census date. Otherwise, probation will begin the next payment period for which the student enrolls.

The appeal must include the items listed below for initial consideration. Incomplete appeals will be rejected. The SAP Review Committee may request additional documentation or clarification if the documentation provided does not support the timeline or circumstances of the appeal.

## SAP Appeal Requirements

- SAP Appeal Form
- Academic Plan Calculation Form completed by their Academic Advisor
- Personal statement addressing the extenuating circumstances that contributed to unsatisfactory academic progress during the corresponding semester(s) in which GPA/SAP requirements were not met
- Statement addressing how circumstances have changed to achieve satisfactory academic progress in the future
- Third party statements must be unbiased documentation of the extenuating circumstances. Letters from individuals must be signed, and professional statements must be signed on company letterhead.
- Extenuating circumstances include, but are not limited to, illness, accident, grievous personal loss, employment change or relocation, or other circumstances beyond the student's control. The following are examples of third-party documentation:
- Obituaries or death certificates
- Physician statements verifying extenuating circumstance described in the student's statement
- Written statement from college staff supporting the student's statement
- Extenuating circumstances do not include, for example, a dislike of an instructor or mode of instruction or a circumstance for which a previous appeal was approved
- Submit SAP Appeal Form through FA Online forms.


## Academic Plan Calculation Form

Contact your Academic Advisor to initiate this form. Both the student and Academic Advisor must electronically sign the form to confirm and acknowledge how many credit hours away from certificate/degree completion the student is. This must be uploaded with the appeal and is used to create the academic plan used for the probationary period if appeal is approved.

## SAP Appeal Decision Notification

Appeal decisions are sent via Sinclair.edu email typically within 7-10 days after the appeal is submitted if the Review Committee was able to make a determination.

## Financial Aid Probation Status

Financial Aid Probation status is assigned when a student successfully appeals a Financial Aid Unsatisfactory or Financial Aid Maximum Time Frame status. The student is assigned an academic plan that defines the requirements to maintain federal aid eligibility for each semester of enrollment. If the academic plan requirements are not met, the student's federal aid is denied until either regaining eligibility by meeting the requirements through completed coursework, or by successfully appealing for reconsideration of federal financial aid eligibility.

The Academic Advisor and student develop the academic plan to define the probationary period for each student. Successful completion of the academic plan results in program completion or Financial Aid Satisfactory status and continued aid eligibility.

A student may file an SAP appeal to regain federal aid eligibility. The SAP appeal may be approved if the student documents extenuating
circumstances during the probationary semester. These must be different than the extenuating circumstance from previous semesters.

## Academic Plan Calculation

Students with an approved appeal are placed on a Financial Aid Academic Plan as a condition of Financial Aid Probation. This plan is calculated based on remaining credit hours needed for the active program completion, which the academic advisor certifies on the Financial Aid Academic Plan Calculation Form and the student submits with the SAP appeal. Financial aid staff evaluate the program and cumulative GPA to determine if institutional graduation requirements can be achieved within the remaining program credit hours.

The academic plan includes the required GPA and Pace for each semester of enrollment to maintain federal financial aid eligibility. The academic plan states the first semester of federal aid eligibility authorized by the approved appeal, and each subsequent semester. The active program of study for which the appeal was approved is the only program authorized by the academic plan. If a student on financial aid probation changes programs, federal financial aid is suspended at the end of semester evaluation. The student may re-appeal based on the new program of study.

## Revised Academic Plans

A revised Financial Aid Academic Plan Calculation Form may be submitted due to change in required courses or other necessary changes, such as admission to a limited enrollment Health Sciences Degree program. This must be completed and signed by the academic advisor and student. Revised calculation forms are reviewed by Financial Aid Officers on a case-by-case basis. It's possible some revisions could result in suspension at the end of semester evaluation.

## Academic Plan Evaluation

Academic plans are reviewed at the end of semester SAP evaluation. The evaluation first assesses satisfactory status of the cumulative qualitative and quantitative SAP components. If the cumulative standards are satisfactory, the financial aid status is Satisfactory, and the student is no longer monitored under the terms of the academic plan. If the student does not meet the cumulative standards but meets the academic plan requirements for the semester, the student remains in financial aid probation status and retains federal financial aid eligibility. If cumulative and academic plan standards are unsatisfactory, federal financial aid is suspended for future semesters. Students may appeal to regain their eligibility if they have a different extenuating circumstance for which the prior appeal was approved.

## Academic Plan Notification

The financial aid academic plan is sent via Sinclair.edu email.

## Regaining Eligibility

Students who are ineligible to receive federal financial aid due to unsatisfactory SAP status and did not file a successful appeal will be evaluated at the end of the next semester of enrollment if Sinclair has received a FAFSA for the corresponding year. If the cumulative SAP requirements are met, federal financial aid eligibility will be reinstated.

Federal financial aid cannot be paid retroactively for a semester during which a student was ineligible to receive federal financial aid.

There is no limit to the number of appeals a student may submit; however, if choosing to re-appeal a previously rejected appeal, documentation not included in prior appeals is necessary for reconsideration, and approval is not guaranteed. For example, documentation of successful completion of college level courses since the previous rejection could be submitted to demonstrate academic progress.

If a student has had multiple approved SAP appeals, a manager may review future appeals and may require a meeting between the student and appropriate Sinclair staff based on the student's situation to discuss terms of FA probation.

## Grade Definitions and Treatment in SAP Calculation

Institutional credit hours include college level, developmental (DEV, ACA, and EXL subject codes), and English as a Second Language (ESL subject code).

| Grades | GPA | Attempted | Completed | Testing/Other <br> Grades | GPA | Attem |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- |
| A - Excellent | Y | Y | Y | Y - <br> Proficiency <br> Credit | N | Y |
| B - Good | Y | Y | Y | AA - <br> Articulation <br> Agreement | N | Y |
| C - Average | Y | Y | Y | AP - <br> Advanced <br> Placement | N | Y |
| F - Failure | Y | Y | N | CT - Career <br> Tech Credit | N | Y |
| Transfer |  |  |  |  |  |  |


| W - <br> Withdrawal | N | Y | N | the "\#". <br> - SAP is calculated of $S$ and $P$. <br> - SAP is calculated of $U$ and $N$. | Grades received through a consortium or contractual agreements are APtingludedides the end of term GPA calculation. Consortium grades are included in the Pace and MTF end of term SAP calculations as atpanibteg and completed credit hours if a passing grade was earned. <br> Single Program of Study Requirements |
| :---: | :---: | :---: | :---: | :---: | :---: |
| N - Progress | N | Y | N |  | Students may not be enrolled in multiple academic programs concurrently to register for classes. If the student was granted an |
| X - Audit | N | N | N |  | exception to this policy and has more than one active program of study, the active, highest-credential program with the most recent start date |
| IP - In <br> Progress | N | Y | N |  | will be evaluated for satisfactory academic progress. The SAP standards will include all Sinclair credits and grades and transfer credits. |
| -- No grade assigned | Y | Y | N |  | A student must be enrolled in a federal financial aid eligible program before the GPA, Pace or MTF SAP calculation occurs. The student is assigned the SAP status of ineligible program (IEP) until an eligible |
| Transfer Credit |  |  |  |  | program is declared. Federal aid ineligible programs include, but are not limited to Ohio Transfer 36, SCC graduate, and non-degree programs with program code ending in ND. Additionally, many |
| Transfer credit hours accepted from other institutions are included in both the attempted and completed credit hours calculation for Pace and MTF, but not in cumulative GPA. |  |  |  |  | certificates are ineligible until approved by the U.S. Department of Education, and some programs are permanently ineligible for federal financial aid. Students should contact an Academic Advisor for information on program federal aid eligibility. |

## Repeat Coursework

All course attempts are calculated in the pace of completion and maximum timeframe. The financial aid SAP policy abides by the College's academic policy regarding the treatment of repeated courses and the placement of grades in the calculation of the cumulative GPA. See the complete Academic Repeat Coursework Policy for additional information.

## Dropped Courses

Attempted credits include all courses in which a student remains enrolled beyond the last day of the add/ drop period of the course, whether the student began attending or not. Courses in which the student drops after the add/drop period are given a grade of "W."

## Fresh Start

The College's academic amnesty policy is superseded by the Financial Aid Satisfactory Academic Progress policy when calculating the SAP status to determine financial aid eligibility.

## Treatment of Remedial and English as a Second Language Courses

Remedial (Developmental) and English as a Second Language (ESL) courses are included in attempted and completed hours in the Pace and MTF end of semester SAP evaluations. If a grade of pass or fail is received in a remedial or ESL course, a passing grade is calculated as a 2.0 in the financial aid GPA and a failing grade is calculated as zero.

## Treatment of Consortium, Change of Major, Second Degree, and Second Major Courses

Consortium Agreement Grades

Sinclair's institutional scholarships include need-based and merit-based awards to new and currently enrolled students ranging from \$100$\$ 5,000$ per year. Typically, students must have at least a 2.0 cumulative GPA; for the first semester, the GPA requirement is waived for new students. Students may be eligible for more than one institutional scholarship per academic year.

Competitive scholarships are also available to students on a departmental basis. Students should contact their department to determine if scholarships are offered for their department.

High School Merit Scholarships - These scholarships are offered each year to high school seniors planning to enroll at Sinclair in the Fall semester after graduation. They range in amount from \$2,000-\$3,000 per year and include the following awards for Montgomery County residents: Presidential Scholarship ( 3.5 minimum high school GPA required) and the Virginia McNeal Scholarship ( 3.0 minimum high school GPA required). A Regional Scholarship is offered to nonMontgomery County residents ( 3.0 minimum high school GPA required). Further information regarding those scholarships can be found at www.sinclair.edu/scholarships

Foundation Scholarships - The Sinclair Foundation annually funds scholarships through endowment earnings and cash gifts to the college. Scholarships are available to currently enrolled Sinclair students, graduating high school seniors, and adults entering college for the first time. Students with enough Pell Grant and other grants to cover tuition, books and fees are typically not considered for these scholarships.

External Scholarships--Several scholarships are awarded by agencies, clubs and organizations outside of Sinclair. Students are encouraged to periodically check the External Scholarship Resources and other scholarship resources link on the web at
www.sinclair.edu/scholarships
Visit www.sinclair.edu/scholarships for additional scholarship information including application and selection details.

## Student Private Loans

Sinclair provides information about private lenders who qualify to provide private loans to community college students who do not qualify for federal loan programs or who need additional financial assistance to meet educational expenses.

The yearly (or term) amount cannot exceed the cost of attendance minus other financial aid and resources. How to apply: Visit Sinclair's FASTChoice link on the Financial Aid and Scholarships page for a list of private education loan lenders most used by Sinclair students.

These are student loans offered by private companies. They are not guaranteed by the Federal Government. Private loans are meant to help students cover education costs not met by other forms of financial aid. It is recommended that students take full advantage of all government loans available to them before considering a supplemental private loan.

## Verification Process for Applicants Filing the FAFSA

Institutions are required to verify the accuracy of a student's FAFSA to assure federal aid is awarded to those who are eligible. Approximately

20\% of FAFSA applications are selected for verification each year.
Sinclair may also select FAFSAs for full verification but will request additional documentation if there is conflicting information that requires resolution. Federal financial aid is not awarded until verification is completed or conflict is resolved. If a student is selected for verification or a conflict occurs after federal financial aid is awarded, the aid will be placed on hold until verification or the conflict is resolved.

Students are notified they are selected for verification or have conflicting information that needs resolved via their Sinclair.edu email account. The email specifies the actions required by the applicant and if applicable, how to access FA Online Forms to complete the required documents. The student also receives a FAFSA processing email notification from U.S. Department of Education (ED) stating their FAFSA was processed, and a FAFSA Submission Summary was generated, which indicates their eligibility status and if they are selected for verification.

For the 2024-2025 award year the FAFSA information selected by ED that an institution, applicant and, if appropriate, the applicant's parent(s) or spouse may be required to verify are:

- Adjusted Gross Income
- Income earned from work
- U.S. Income Tax Paid
- Untaxed Portions of Individual Retirement Account (IRA) Distributions
- Untaxed Portions of Pensions
- IRA Deductions and Payments
- Tax Exempt Interest Income
- Education Credits
- Foreign Income Exempt from Federal Taxation
- Family/Household Size
- Identity/Statement of Educational Purpose

Sinclair may select FAFSA items for verification beyond what is required by ED. If ED or Sinclair selects an applicant for verification under this policy, the applicant must complete the required actions specified or provide the requested documents/ information. Students may also review the list of required documents by logging into the Financial Aid Portal from my.sinclair.edu. Applicants are advised to complete the required actions or submit copies of the requested documents within 14 days of the request made by the Financial Aid \& Scholarships office. However, the Federal deadline for verification completion is the earlier of 120 days from the applicant's last date of attendance or the federal deadline of September 16, 2025. This includes making any necessary corrections, submitting those corrections to the FAFSA Processing System, and receiving the new corrected FAFSA Submission Summary.

For the 2024-2025 award year, the tax information verified is for the tax year ending December 31, 2022. If your financial situation changed since 2022 or if any other information reported on the FAFSA has changed since it was submitted, Sinclair may be able to review and possibly adjust the information to better reflect your household financial situation. To be considered for this adjustment, you will need to complete the Special Circumstance $\hat{a} €$ " SAI Appeal Form on the FA Online Forms Portal and submit the requested documentation.

The following consequences occur for applicants who fail to complete verification in a timely manner:

- Applicants who do not complete verification within the required deadlines will not qualify for federal financial aid.
- No federal grant or loan funds will be disbursed.
- No federal financial aid loan will be originated.
- If a loan was originated prior to the notice of verification, any undisbursed monies will be returned to the ED.
- Student employment in a Federal Work Study job will be terminated.
- If federal grant funds were disbursed prior to being selected for verification and there was an overpayment, the monies must be returned to the appropriate federal grant programs.
- Refunds, if any, will not be available until verification is completed and corrections (if necessary) have been processed and received by Sinclair from the U.S. Department of Education.
Financial aid offers are based on the information provided on the applicant's FAFSA. Federal need-based programs, such as the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), and the Federal Subsidized Direct Loan Programs have strict eligibility requirements. If the data reported on verification documents differs from the information reported on the applicant's FAFSA, the applicant's eligibility for funding from these programs may be affected.

If any credible information indicates that the applicant engaged in fraud or other criminal misconduct in connection with their federal student aid application, Sinclair will report applicants to the Office of the Inspector General of the U.S. Department of Education after review.

## Withdrawal \& Return of Title IV Funds

Students earn federal financial aid by attending class (i.e., completing all scheduled days). Any unearned portion must be returned to the appropriate Title IV program. Federal law specifies how Sinclair must determine the amount of Title IV program assistance that you earn if you withdraw from school. The Title IV programs offered by Sinclair that are covered by this law are: Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOG), Federal Iraq and Afghanistan Service Grants, Federal Direct Loans, and Federal PLUS Loans.

## Calculating a Return of Title IV Funds When a Student Withdraws

When you withdraw during your payment period, the amount of Title IV program assistance that you have earned up to that point is determined by a specific formula. If you received (or if Sinclair or your parent received on your behalf) less assistance than the amount that you earned, you may be able to receive those additional funds. If you received more assistance than you earned, the excess funds must be returned by Sinclair and/or you to the U. S. Department of Education (ED). You will be responsible for repayment of the funds to Sinclair that it paid to ED on your behalf.

The amount of assistance that you have earned is determined on a prorated basis. The percentage of the period completed is determined by dividing the number of calendar days completed in the payment period, as of the day the student withdrew, by the total number of calendar days in the payment period. The number of calendar days includes all days within the payment period, except for institutionally scheduled breaks of five or more consecutive days. The day the student withdrew is counted as a completed day. For example, if you completed
$30 \%$ of your payment period, you earned $30 \%$ of the assistance you were originally scheduled to receive. Once you have completed more than $60 \%$ of the payment period, you earn $100 \%$ of the assistance that you were scheduled to receive for that period. That is, there are no unearned funds.

## Withdrawing from a Course or all Classes May Affect a Student's Financial Aid

Students receiving financial aid who withdraw or stop attending, in most cases, will be required to return a portion of financial aid received. A student should submit an official withdrawal from classes to the Registration \& Student Records office (RSR). Before withdrawing or stopping attendance in classes, the student should be aware of the proper procedure for withdrawing from classes and the consequences of withdrawing or stopping attendance. Official withdraw is the responsibility of the student. The Sinclair Official Withdrawal Policy is available online at: $w w w$. sinclair.edu/policies

Questions on Return of Title IV Funds may be addressed to the Financial Aid \& Scholarships office. Questions on withdrawal should be addressed with an Academic Advisor.

## The Withdrawal Date

The withdrawal date used in the Return of Title IV calculation is the actual date the official drop is received by the Registration and Student Records office. If a student stops attending classes without notifying Sinclair, the withdrawal date will be the last date of recorded attendance at an academically related activity in a course for which attendance was established during the attendance verification period.

## Post Withdrawal Disbursements

If you did not receive all funds that you earned, you may be due a postwithdrawal disbursement. Sinclair will notify the student within 30 days of the date of determination of withdrawal concerning the post withdrawal disbursement. If the post-withdrawal disbursement results in a credit balance, the credit balance will be returned to the student no later than 14 days from the date of disbursement.

If your post-withdrawal disbursement includes loan funds, Sinclair must get your permission (or your parent's permission for a Direct PLUS Loan) before it can disburse the funds. You (or your parent for a Direct PLUS Loan) may choose to decline some or all of the loan funds so that you do not incur additional debt. The student (or parent if a PLUS loan) must respond within 14 days of the date the postwithdrawal disbursement notification was sent. Entrance counseling must be completed before funds are disbursed.

Sinclair may automatically use all or a portion of your post-withdrawal disbursement of grant funds for tuition and fees and will apply those funds to your student account within 45 days of the date of determination of your withdrawal from Sinclair. Sinclair needs your permission to use the post-withdrawal grant disbursement for all other school charges. If you do not give your permission (Sinclair may ask for this when you enroll or register), you will be offered the funds. However, it may be in your best interest to allow Sinclair to keep the funds to reduce your debt at the school.

There may be some Title IV funds that you were scheduled to receive that cannot be disbursed to you once you withdraw because of other eligibility requirements. For example, if you are a first-time, first-year undergraduate student and you did not complete the first 30 days of your program before you withdrew, you will not receive any Direct Loan funds that you would have received had you remained enrolled past the 30th day.

## Returning Unearned Federal Funds

If you receive (or if Sinclair or your parents receive on your behalf) excess Title IV program funds that must be returned, Sinclair must return a portion of the excess equal to the lesser of:

1. Your institutional charges multiplied by the unearned percentage of your funds, or
2. The entire amount of excess funds.

Sinclair will return Title IV funds in the following order:

1. Unsubsidized Direct Loan
2. Subsidized Direct Loan
3. Direct PLUS Loan
4. Federal Pell Grant
5. Iraq and Afghanistan Service Grant
6. Federal Supplemental Educational Opportunity Act (FSEOG)

The required return of Title IV funds will be made to the Title IV programs within 45 calendar days of the date of determination of withdrawal.

In addition to returning unearned loan and grant funds due from the school to the Title IV program, Sinclair will return those excess unearned grant funds due from you to the Title IV program. You will be required to repay Sinclair for the student portion of the funds returned to the Title IV programs.

Any loan funds that you (or your parent for a Direct PLUS Loan) are eligible to keep must be repaid in accordance with the terms of the promissory note. That is, you make scheduled payments to the holder of the loan over a period of time agreed upon by you (or your parent for a Direct PLUS loan).

Any amount of unearned grant funds that you must return is called an overpayment. The maximum amount of a grant overpayment that you must repay is half of the grant funds you received or were scheduled to receive. You do not have to repay a grant overpayment if the original amount of the overpayment is $\$ 50$ or less. You must make arrangements with Sinclair to repay Sinclair the amount of the unearned grant funds paid on your behalf by the college.

The requirements for refunds and repayments of Title IV program funds when you withdraw are separate and different from any Sinclair refund policy. The institutional refund policy determines the amount of tuition and other charges owed the College and has no impact on the Return of Title IV funds calculation. Therefore, you may still owe funds to Sinclair to cover unpaid institutional charges. Sinclair may also charge you for any Title IV program funds that the school was required to return. Students are encouraged to review Sinclair's refund of fees policy which can be found online at: www.sinclair.edu/ bursar-refund-policy or you may ask Sinclair for a copy of its refund policy.

If a credit balance exists on the student's account after applying institutional refund policy and the R2T4 calculation, the institution will
disburse the credit balance to the student no later than 14 days from the date the school performs the R2T4 calculation.

Sinclair can provide you with a copy of the requirements and procedures for an official academic withdrawal from courses or an administrative withdrawal or you can review it at: https://policies.sinclair.edu/policy/Official_Withdrawal_from_Colle ge_Policy

If you have questions about your Title IV program funds, you can call the Federal Student Aid Information Center at (800) 4-FEDAID (800-433-3243). TTY users may call 1-800-730-8913. Information is also available on Student Aid on the Web at: www.studentaid.gov

All information contained in the Withdrawal and Return of Title IV Funds Policy is subject to change based on changes to federal law, regulation, or Sinclair's policy and procedure. If changes are made, students must abide by the new policy.

Note: In many instances, the student will owe a balance to Sinclair based on the returns made by Sinclair to the U.S. Department of Education. Please contact the Sinclair Financial Aid \& Scholarships office for additional information.

## Paying for College

## Tuition and Fees

Fees current as of Fall 2024. For current tuition rates see www.sinclair.edu/services/bursar or call (937) 512-3000.

| Per Credit <br> Hour Fees | Montgomery <br> County Residents | Other Ohio <br> Residents | Out-of State and <br> International <br> Students |
| :--- | :--- | :--- | :--- |
|  <br> Fees | $\$ 146.03$ | $\$ 146.03$ | $\$ 146.03$ |
| Out-of-County <br> Surcharge |  | $\$ 47.25$ | - |
| Out-of-State <br> Surcharge |  | - | $\$ 203.37$ |
| Per Credit <br> Hour | $\$ 146.03$ | $\$ 193.28$ | $\$ 349.40$ |

[^0]Additional Fees

| Fee Names | Fee Amount |
| :--- | :--- |
| Course, lab, and <br> program fees | Varies, dependent on individual course or <br> program to help defray costs in selected courses <br> that are expensive to offer or have pass-through <br> costs paid to a third-party provider. |
| Registration Fee <br> for first-time <br> registrants | $\$ 20.00$ |
| Auxiliary Services |  |
| Fee (per semester) | $\$ 85.00$ |
| Online (WWW) <br> Course Fee | $\$ 7.50$ per credit hour (extra fee beyond tuition) |

## Tuition Payment Plan

Students are responsible to the college for all tuition and fees incurred as a result of registration. Sinclair offers a tuition payment plan as a convenient budget plan to assist students in managing their tuition costs for a current term. This is not a loan program - no interest or finance charges will be assessed by Sinclair, and there is no credit check to enroll. To help meet your educational expenses, Sinclair offers this tuition payment plan for a $\$ 25.00$ per term nonrefundable enrollment fee. The enrollment fee is automatically deducted immediately from your account. If this fee is not able to be collected, your agreement may not be activated, or you may be unenrolled from the payment plan. You must enroll in the payment plan every term you wish to participate.

A deposit (down payment) may be required. Payment plan enrollment and payment dates for the current term are available at: http://paymentplan.sinclair.edu under the "Payment Calendar" link.

If students enroll in classes during on-time registration and wish to participate in the payment plan, enrollment in the Payment Plan must be done by Sinclair's specified final payment deadline date.

Prior to the college's published refund date, if a tuition payment cannot be withdrawn from the students' bank or credit card, the course registration will be in an "unpaid" status and may be subject to deregistration from classes. If a payment is not available from the students' financial institution after the refund date, the college may proceed with collection activity without further notice.

Enrollment is made online. For more information, please see below or visit: http://paymentplan.sinclair.edu.

## Important Points:

- Payments are Automatic Withdraws
- Payments through Sinclair portal do not stop automatic withdraw
- Scheduled payment dates cannot be changed
- Adding classes will increase monthly payments


## Forms of payment

Automatic Bank Payment (ACH): A bank-to-bank transfer of funds that you have preapproved for your expenses at Sinclair College. Payments may be made from either your checking or savings account. Payments are processed each month and will continue until the balance is paid in full. Please check your agreement for the payment deadline dates.

Credit Card Option: Your monthly payment will be automatically charged to the credit card you designate. Payments will be charged each month until the balance is paid in full. Sinclair currently accepts Visa and MasterCard only. Please check your agreement for the payment deadline dates.

## Information on Missed Payments

Should an automatic ACH payment or credit card payment be missed, a $\$ 30.00$ Missed/Returned Payment Fee will be automatically assessed to your account. You will be notified by Sinclair of the missed/returned payment via email.

## Payment Calendar

## Summer Term

Enrollment period begins around the last week of March; begins with the first day of on-time registration.
Payments will be processed on the 5th of each month.

| Summer Term Enrollment Periods | Required Do |
| :--- | :--- |
| 1st day of registration - April 4 | None |
| April 5 - May 4 | None |
| May 5 - Approx. end of May | $33 \%$ |
| Approx. first week of June - approx. 2 weeks prior to July 5 | $50 \%$ |
| ADDITIONAL INFORMATION |  |

## ADDITIONAL INFORMATION

- Unpaid courses, not under the payment plan, may be removed from course schedules.
- Enrollment in the plan is required every term you wish to participate
- Registrations made after final payment date are to be paid for at the time of registration or enrolled in the payment plan upon registration.
- It is the responsibility of the student to either make payment in full, enroll in a successful payment plan, or withdraw from classes by the published payment deadline.
- Enrollment periods are subject to change each year depending on the academic and payment calendars.
NOTE: The Enrollment Fee is automatically deducted immediately from your account. If this fee is not able to be collected, your agreement may not be activated, or you may be unenrolled from the payment plan.


## Fall Term

Enrollment begins around the second week in April; begins with the $1^{\text {st }}$ day of on-time registration.
Payments will be processed on the 20th of each month.

| Fall Term Enrollment Periods | Required Down Payment |  | Payment Schedule <br> a after innal payment |
| :---: | :---: | :---: | :---: |
| 1st day of registration - May 19 | None | $\begin{aligned} & \text { at th } \\ & \text { upo } \end{aligned}$ | istration or enrelled in th May 20, June 20, July |
| May 20 - June 19 | None | $\begin{aligned} & \text { ft is } \\ & \text { in } \mathrm{f} \end{aligned}$ | ifityof 20 , Jus stydent to ene successful payment plan, |
| June 20 - July 19 | None |  | lishly <br> $s$ are subject to change |
| July 20 - mid-August (typically the fall payment due date) | None | 4ере <br> NOTE: The E |  is automatically deduct |
| Approx. mid-August - 8th day of term | 25\% | from yourlacco agreement may |  ated, or you may be unen |
| 9th day of term - Approx. Sept. 30 | 33\% | payment plan. | Date enrolled, Oct. 20, |
| Approx. Oct. 1-Approx. end of October | 50\% | Tuition Paym | nisamdiceolidititious. 20 |

## ADDITIONAL INFORMATION

- Unpaid courses, not under the payment plan, may be removed from course schedules.
- Enrollment in the plan is required every term you wish to participate
- Registrations made after final payment date are to be paid for at the time of registration or enrolled in the payment plan upon registration.
- It is the responsibility of the student to either make payment in full, enroll in a successful payment plan, or withdraw from classes by the published payment deadline.
- Enrollment periods are subject to change each year depending on the academic and payment calendars.
NOTE: The Enrollment Fee is automatically deducted immediately from your account. If this fee is not able to be collected, your agreement may not be activated, or you may be unenrolled from the payment plan.


## Spring Term

Enrollment period begins around the last week of October; begins with the $1^{\text {st }}$ day of on-time registration.
Payments will be processed on the 20th of each month.

| 1st day of registration - November 19 | None |
| :--- | :--- |
| November 20 - December 19 | None |
| December 20 - Approx. January 31 | $25 \%$ |
| Approx. Feb. 1 - B-Term payment due date | $33 \%$ |
| Day after B-term due date- Approx. March 31 | $50 \%$ |

## ADDITIONAL INFORMATION

- Unpaid courses, not under the payment plan, may be removed from course schedules.
- Enrollment in the plan is required every term you wish to

Enrollment: You must enroll in the payment plan for every term you wish to participate. The payment plan is for current term only and not for past term balances.

Tuition Only: Book charges cannot be paid through the payment plan.
Enrollment Charge: A \$25 non-refundable charge for each term enrolled.

Due Dates: Payments due on dates stated online, in the payment plan agreement, and in literature. No extensions are allowed.

## Missed/Returned Payments:

- Fee: A $\$ 30$ late fee will be assessed for each installment payment that is missed.
- Reattempts: The missed installment payment will be reattempted beginning the next day. To ensure a successful reattempt, the student must log into the payment plan and verify or update the payment method.
- Consequences: If the payment and reattempts are unsuccessful, the student will be required to log back into the payment plan and make the missed payment(s). Failure to do so will result in a hold being placed on the student account and could result in classes being removed from the schedule. Missed payments will be distributed among any

| Spring Term Enrollment Periods | Required Down Payment | No. of Paynremas | paypaymescterntue term. |
| :---: | :---: | :---: | :---: |

Down Payment: May be required for enrollment in the payment plan depending on the timeframe a student enrolls within the active plans available.

Dropped Classes: Student is responsible for remaining payments for classes dropped after the "drop with refund" period as scheduled according to plan payments and Sinclair's payment deadlines.

Refunds: Please review Sinclair's refund policy for more information.
Balance Adjustments: Payment plan account balance and payments due will be adjusted if account changes such as class additions, class drops, missed payments, or changes to financial aid or other third-party funding occur.

## Deadlines:

- For Enrollment: If student enrolls in classes during on-time registration, enrollment in the Payment Plan must be done by Sinclair's specified final payment deadline dates.
- For Adjustments: Changes to the account must be made at least 10 calendar days before the payment date. Otherwise, changes may not reflect until the next scheduled payment.
Making Payments: Payments should not be made at the Cashier's Office or through the online payment center accessed through the student portal. Payments are automatically deducted from the credit card or bank account used when enrolling in the plan. Contact with the Cashier's Office must be done before making any payments outside of the scheduled ones within the active plan to get an understanding of how that could impact the payment plan.
- If tuition is being paid by a party other than the student, an authorized user will need to be added to the payment plan account.


## Successful / Unsuccessful Plans:

- A successful plan: Must be in place by Sinclair's payment deadline date each term and any potential down payment and/or scheduled payments received successfully.
- Multiple agreement attempts: If a student has two unsuccessful payment plan attempts for a current term, then the student will not be able to use the payment plan and will immediately have to pay in full or may be subject to deregistration.
- Unsuccessful plan: Sinclair may be entitled to (1) declare the full balance plus late fees immediately due and payable by law, (2) refuse subsequent registration for any classes and/or drop current classes, (3) deny future enrollment in any payment plan, (4) submit unpaid balance to the Ohio Attorney General for collection, and (5) withhold diplomas from being released until the unpaid balance, as well as all attorney fees, legal expenses, and other collection costs are paid in full.
Agreements may be terminated if:
- Sinclair is unable to obtain the $\$ 25$ enrollment charge.
- Down payments fails on first attempt.
- A regularly scheduled payment and the reattempt fails.
- A balance remains on the student account from a previous term.

Agreements terminated for any of the above-listed reasons may result in deregistration from classes. Sinclair can terminate a payment plan for any given reason at any time and ask for payment in full before the next deregistration.

## Additional Information on Paying for College

To learn more about financial aid and paying for college, visit https://www.sinclair.edu/admissions/paying-for-college

## Veterans \& Military-Affiliated Educational Benefits

- 

$\bullet$

Sinclair can provide you with a copy of the requirements and procedures for an official academic withdrawal from courses or an administrative withdrawal or you can review it online at: https://catalog.sinclair.edu/policies/Academic/Official-Withdrawal-from-College-Policy

If you have questions about your Title IV program funds, you can call the Federal Student Aid Information Center at (800) 4-FEDAID (800-433-3243). TTY users may call 1-800-730-8913. Information is also available on Student Aid on the Web at: www.studentaid.gov

All information contained in the Withdrawal and Return of Title IV Funds Policy is subject to change based on changes to federal law, regulation, or Sinclair's policy and procedure. If changes are made, students must abide by the new policy.

Note: In many instances, the student will owe a balance to Sinclair based on the returns made by Sinclair to the U.S. Department of Education. Please see a Sinclair Financial Aid Officer for additional information.

## Military-affiliated Educational Benefits

Sinclair is proud to assist our military affiliated students. Educational benefits for military affiliated students come in several forms: Military Tuition Assistance (TA) programs, Veterans Affairs (VA) Education Benefits (also known as the GI Bill®), Scholarships and Ohio Funding. In general, Military TA programs provide funding to currently serving members of the United States Armed Forces, VA Education Benefits are determined by service information found on the service member's DD214, and other benefits are determined by military-affiliation.

The best way to get information about using these benefits is to contact the Military Family Education Center (MFEC). You can contact the MFEC by phone at (937) 512-2586, or by email at mfec@sinclair.edu. Students can find updated information and forms to process education benefits at www.sinclair.edu/mfec.

## Veteran Educational Benefits

Students who meet the Department of Veteran Affairs (VA) eligibility criteria may be certified to use educational benefits. For information
about VA benefits, students can visit the VA directly at www.va.gov. Students will work with the Military Family Education Center (MFEC) at Sinclair to assist in using this funding through the college.

Students that are interested in using their GI Bill® benefits at Sinclair should use the following steps:

1. Go to www.sinclair.edu/MFEC to find checklists for benefits and other important forms to assist in attaining education funding from the VA.
a. If the student does not have a Certificate of Eligibility (COE) from the VA, they will need to complete the application for the benefits through the VA website.
2. Students that have the COE approval letter from the VA, will submit a Semester Enrollment Form (SEF) each term after they register for classes.
3. MFEC will verify the following:
a. Student is degree seeking
i. Students' degree program has been approved by the VA
at https://inquiry.vba.va.gov/weamspub/buildSearchInstitution Criteria.do
b. All Development and Remedial classes require placement test scores indicating what course the student placed. Any remedial or
developmental courses must be taken in-person to utilize VA funding.
c. All registered classes are required toward degree program or required prerequisites of the degree program.
4. GI Bill® Benefits Stipends
a. VA does not follow the same guidelines for full-time benefits. Students will need to visit the VA at https://www.va.gov/education/ to learn more.

For questions about using the GI Bill® at Sinclair, please
contact: MFEC, Dayton Campus, 937-512-2586 or mfec@sinclair.edu.

## Repayment of Benefits

Under certain circumstances, repayment of benefits to the VA could occur. Please see the following list of possible repayment situations.

1. Dropping from courses
2. Non-attendance of courses
3. Punitive grades for courses (Z, F, U grades)

To avoid these situations, it is advisable to speak with the MFEC to discuss the potential impacts of not successfully completing courses on your VA education benefits.

## Transfer Credit

Students with prior credits who attended previous college(s) or served in the military must request official transcripts. Information about
requesting official transcripts and tools to assist in preliminary searchable credit reviews, can be found at www.sinclair.edu/MFEC.

Official transcripts will be evaluated by the Office of Registration \& Student Records (RSR). Once the credits have been officially evaluated, RSR will send the student a letter informing them of the number of credits accepted. Students can make an appointment with an Academic Advisor to discuss transfer credit by visiting https://www.sinclair.edu/services/welcome-center/academicadvising/.

## Military Attendance Policies

Sinclair Community College is dedicated to the success of our military students. To best serve the students who serve our country, Sinclair has several policies to assist. We recommend that students, staff, and faculty speak with the MFEC to discuss each student situation.

1. Military Attendance Form- A form to assist in the facilitation of conversation between the student and instructor if a student is deployed or has mandatory training that impacts attendance. This form can be found at: www.sinclair.edu/mfec or on Sinclair Forms Central
2. Military Refund Appeal- A form to complete if a student dropped a class with a 'W' grade for military reasons. This form can be found at:
https://www.sinclair.edu/services/welcome-center/bursar/tuition-refund-appeal-information/

## Other Military Funding

In addition to the GI Bill® there are other funding sources that are available to military-affiliated students. These benefits are Federal Tuition Assistanbce (FTA), National Guard Scholarship (ONGSP), My Career Advancement Account (MyCAA), and the Ohio War Orphan Scholarship (OWOS). Detailed information about applying for and utilizing these benefits can be found on the checklists located on www.sinclair.edu/mfec.

## Wright Patterson Air Force Base (WPAFB)

Sinclair is proud to partner with WPAFB with assisting students achieve their academic goals. Sinclair is one of the few colleges in the region that offers services and classes on base. The WPAFB Sinclair office is in Area B, Building 50. For directions, information, and to schedule appointments with Sinclair at WPAFB, please visit www.sinclair.edu/mfec.

## Dayton Veteran Lounge

As a thank you for our veteran and service members, we offer a lounge space at the Dayton Campus next to the MFEC office. The lounge is intended to serve as a resource space for veterans and service members to use, while working toward their educational goals. For information about how to use the Veteran Lounge, please
visit www.sinclair.edu/MFEC.

## MFEC Contact Information:

Dayton Campus-Building 10444
Monday-Friday 8 AM EST - 5 PM EST

## Aviation Students Using the GI Bill ${ }^{\circledR}$

Best Practices Process: Advising Students in the Aviation Technology/Professional Pilot program that are using the GI Bill ${ }^{\circledR}$

Students that are in the Aviation Technology/Professional Pilot program and are utilizing GI Bill® benefits should be made aware that the Department of Veteran Affairs (VA) does not pay for certificates within the program, they will only pay for a degree. This means you are advised to take general education classes mixed with flight classes showing intent to complete the program.

## Courses and Programs of Study

To help students reach their educational goals, those that have earned college credits outside of Sinclair or served in the U.S. Armed Forces, must have official transcripts sent to Sinclair. Transcripts will be evaluated by the office of Registration \& Student Records. Once the credits have been evaluated, the school will send the student a letter informing them of the number of credits accepted. This information is essential for students and advisors to create an academic plan that accurately reflects the best path to success.

For assistance with creating an academic plan, students need to meet with an Academic Advisor. A degree plan is required before the MFEC can certify any VA educational benefits.

Sinclair's developmental (remedial) courses are approved for VA educational benefits if these courses are recommended through placement testing and are taken in-person.

The following is a listing of programs and courses that are not approved for VA educational benefits:

1. All one-year and short-term technical certificate programs
2. Courses that cannot be credited toward graduation in an approved associate and/or bachelor's degree program
3. Developmental courses taken in an online format (no face-toface class meetings required)
4. Real Estate courses for students not enrolled in the Real Estate associate degree program
5. Professional Pilot courses for students not enrolled in the approved Professional Pilot associate/ bachelor's degree program(s)
Remember: Assistance may be received in course selection, but final course selection is the student's responsibility. Students should follow the course outline as contained in the college catalog and communicate regularly with their academic advisor.

## Current Military Access Scholarship (CMAS)

Military TA and ONGSP programs do not cover college fees. To minimize out-of-pocket costs, Sinclair has established the Current Military Access Scholarship (CMAS) program that pays up to $\$ 250$ in non-tuition fees per semester for students using Military TA. Funds are awarded directly to student accounts after TA has been applied. Students do not need to apply for this scholarship.

## End of Term Reports

The MFEC is required to track information and progression for each student using the GI Bill® to maintain compliance standards. These reports are submitted within 30 days of the end of the full-term. The following reports are submitted by the MFEC:

- Academic Dismissal Report: The MFEC reports students that have previously been on Academic Probation and have been escalated to Academic Dismissal status within the term. This required reporting could cause a debt with the VA and/or drop of future registered classes.
- F/Z/U Grade Report: F/Z/U grades that are considered unearned by the VA. Unearned grades are defined as failing grades with a last date of attendance (LDA) before the end of the term. This required reporting could cause a debt with the VA and/or the college.
- Graduation Report the MFEC reports students that earn a degree within the term.


## GI Bill® Trademark

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about benefits offered by VA is available at the official U.S. Government Web Site at https://benefits.va.gov/gibill/

## Military Tuition Assistance (TA)

Each branch of the United States Armed Forces offers Tuition Assistance (TA) programs for their active duty members and its reservists. Programs are administered by the individual service branches, and typically require coordination through the service member's command structure. Students with questions about using their Military TA at Sinclair can contact the Military Family Education Center (MFEC). You can contact the MFEC by phone at (937) 5122586, or by email at mfec@sinclair.edu.

To use your TA at Sinclair, students need to provide their Branch's TA program with an Evaluated Degree Plan. Requirements for degree plans vary by service branch, but in general the plan must be created and signed by a Sinclair Academic Advisor, list all of the courses required for the degree and show all transfer courses that have been accepted by Sinclair and are applicable to course requirements of the student's program. Students must submit a request to use TA each semester through their Branch's online education portal.

## My Career Advancement Account (MYCAA)

The My Career Advancement Account (MyCAA) Scholarship Program is a workforce development program that provides up to $\$ 4,000$ ( $\$ 2,000$ per year) of financial assistance to eligible military spouses who are pursuing a license, certification or Associate's degree in an occupation or career field. For more information about MyCAA and to apply go to https://mycaa.militaryonesource.mil/mycaa. For questions regarding MyCAA, please contact the MFEC at (937) 512-2586 or mfec@sinclair.edu.

Ohio National Guard Scholarship Program (ONGSP)

The ONGSP is provided to Air and Army National Guard members serving in the Ohio National Guard. This is a state benefit that covers tuition only. To apply, please visit ONGSP.Ohio.gov for each term that you would like to use these benefits.

Once these benefits are approved each term, please send the official document to the MFEC at mfec@sinclair.edu. For questions regarding this process, please contact the MFEC at (937) 512-2586 or mfec@sinclair.edu.

## Ohio War Orphans Scholarship (OWOS)

The Ohio WOS Program awards tuition assistance to the children of deceased or severely disabled Ohio veterans who served in the armed forces during a period of declared war or conflict. For more information about OWOS and to apply go to
https://highered.ohio.gov/wos. For questions regarding OWOS, please contact the MFEC at (937) 512-2586 or mfec@sinclair.edu.

## Retention of Records

Sinclair College under the law (38 U.S.C. 3690(c)) provides records and accounts to be made available for review by authorized representatives of the government "NOTWITHSTANDING ANY OTHER PROVISION OF LAW." The effect of this provision is to allow VA to examine necessary records that may be restricted under laws regarding privacy of student records such as PL 93-380 (Buckley Amendment) or other provisions of the law.

Records of an institution are retained through the MFEC for a period of at least three (3) years following the termination of the enrollment of an eligible individual, or longer if requested by VA or GAO (Government Accountability Office). Sinclair College courses are approved for the enrollment of eligible individuals and must maintain a complete record that includes copies of all advertising, sales, or enrollment materials utilized by or on behalf of the institution during the preceding 12month period.

## Transition Act of 2018

Sinclair's Statement of Compliance for the Veteran Benefit Transition Act of 2018: "In accordance with the Veteran Benefits and Transition Act of 2018, Sinclair College has enacted a policy that protects military-affiliated students using Chapter 33 Post 9/11 and Chapter 31 from being penalized for any delay in payment from the Department of Veteran Affairs (VA) for tuition or fees."

Military-affiliated students that provide an updated Certificate of Eligibility (COE) or Tungsten Authorization, showing eligibility for the current term in question, will not accrue any late penalties, purging of current term classes, restriction of access to any institutional facilities (i.e.; Library, Tutoring \& Learning Center), or be required to borrow additional funds to meet the financial obligation while waiting for funding from the VA.

To learn more about the Veteran Benefit Transition Act of 2018, please visit: https://www.congress.gov/bill/115th-congress/senatebill/2248/text

## Additional Learning \& Support Opportunities

## Accessibility Services

## Building 10, Room 10424 • (937) 512-5113• www.sinclair.edu/accessibility-services

Accessibility Services provides assistance to all qualified students with disabilities, whether they are physical, psychiatric or educational.
Students are required to register with the office and identify their needs in order to be eligible for academic adjustments. All services are based on individual needs. We are here to help students reach their academic goals. Students may begin the process by completing an application on our website www.sinclair.edu/services/support/accessibility-services

## Appalachian Outreach

## Building 10, Room 10424 • (937) 512-4429• www.sinclair.edu/appalachian

Appalachian Outreach collaborates with college and community partners to provide programs and services that help eliminate educational and social barriers, champion the benefits of postsecondary education and life-skills training and promote Appalachian cultural awareness at Sinclair and in the community.

Appalachian Outreach provides community update breakfast meetings which is open to all (students, faculty/staff, community members). We share news important to the culture and learn from a guest speaker about topics of interest

Cultural events offered include traditional music concerts, and presentations from other artists representing Appalachia such as poets, toy makers, and other musicians. Each spring break, a 3-day trip to Appalachia is planned. A limited number of students may attend.

Sinclair tuition \& book scholarships are available to qualifying students of Appalachian heritage.

## College for Lifelong Learning

Building 10, First Floor, Welcome Desk • (937) 512-2372• www.sinclair.edu/lifelong

Adults of any age may enroll in 6000 level, non-credit semester courses. Classes offered can include Art, History and more. Classes carry a modest fee to cover instructional costs. For more information, visit the College for Lifelong Learning web page.

## Counseling Services

Building 10, Room 10424 • (937) 512-3032•
https://www.sinclair.edu/services/support/counseling-services/
Counseling Services offers free and confidential counseling to students to address personal and academic concerns. Counselors help students identify actions steps they can take to reduce and eliminate challenges in their lives.

## Fast Forward Re-engagement Center

Job Center, Suite 250, Edwin C. Moses Blvd. • Dayton, Ohio • (937)
512-FAST (3278) • www.sinclair.edu/fastforward

The Sinclair Fast Forward Re-engagement Center (FFRC), established in 2001, has re-engaged over 4,300 disconnected youth throughout Montgomery County. Nationally recognized as a one-of-a-kind community resource center for families and their students looking to complete their high school credentials and establish their career pathway, FFRC assists students ages 15 and up who have stopped out of school, not attending regularly or are credit deficient in identifying a best fit academic option to get them back on track for graduation. FFRC is a county-wide collaborative partnership with traditional and non-traditional schools, as well as community organizations and youth workforce development agencies throughout Montgomery County.

## Food Pantry

Building 13, Room $426 \cdot$ foodpantry@sinclair.edu• https://www.sinclair.edu/services/support/counseling-services/

The Sinclair Student Food Pantry offers a selection of shelf-stable pantry goods, hygiene products, cleaning supplies, diapers, formula, wipes and for in-person shoppers, the pantry now offers a selection of refrigerated and frozen food items.

## International Education

Building 10, Room 10303•(937) 512-3060•
www.sinclair.edu/international
The International Education Office supports international students and promotes programs and initiatives such as study abroad and Collaborative Online International Learning (COIL). These programs are designed to make Sinclair more globally oriented and internationally connected. Staff members strive to provide high quality services and support to international students and to the Sinclair community.

## LGBTQ+ Outreach

Building 10, Room 10441•(937) 512-2481• www.sinclair.edu/lgbtq-support/

LGBTQ+ Outreach works to welcome students who identify as LGBTQ+ and to advocate for issues related to the LGBTQ+ community, in order to ensure that all students on campus feel welcome, respected, and safe as valued members of the campus community.

## Multifaith Campus Ministry

Building 10, Room 10441 • (937) 512-2481•
www.sinclair.edu/services/support/campus-ministry/
The Office of Multifaith Campus Ministry is a center for spiritual life that encourages interfaith dialogue and spiritual deepening. The Multifaith Campus Chaplain works to provide pastoral care, educational opportunities, and programs related to religious and spiritual life. Students, staff, and faculty from all religious traditions and spiritual practices, as well as those who have no affiliation, are welcome.

## Office of the Ombudsman

Building 10, Room 10424 •(937) 512-2205 •
www.sinclair.edu/ombudsman
The mission of the Office of the Ombudsman at Sinclair is to provide support, mediation, and advocacy for fair processes throughout the institution. The office works to analyze information gathered from student experiences in order to implement procedural changes into Sinclair's culture. The Ombudsman can provide collaborative, mediation, intervention, and connecting services, as well as advocate for fair processes and procedures.

## School Partnerships

## Building 6, Room 6122•(937) 512-2267• www.sinclair.edu/about/offices/sp

College Credit Plus, Tech Prep, and Transition Advising, provide opportunities for students in grades 7-12 to:

- Be exposed to college coursework and career pathways
- Earn college credit PRIOR to high school graduation
- Receive added support with their high school teacher and Sinclair faculty
- Reduce time and cost to a college credential
- Earn scholarship opportunities - Tech Prep and CCP Completion for students continuing at Sinclair after high school
- Develop a post-high school enrollment plan


## Sinclair Campus Store

## Building 7, First Floor • (937) 512-2665 • <br> campuswebstore.sinclair.edu

Visit the Sinclair Campus Store for all the college essential and required supplies you need right on campus or online!

## Sinclair Online Bookstore

Books by eCampus • sinclair.ecampus.com Use the Online Bookstore to order new, used, rental, eBook and marketplace textbooks.

## Sinclair Talks

Sinclair Talks are a variety of workshops, seminars, interactive sessions, dialogues, and service-learning opportunities that are focused on enriching the student experience through a variety of academic resources, career exploration, diversity dialogues, financial opportunities, leadership training, interpersonal development, peer discussions, and more.

## Student and Community Engagement

Building 8, Room 8025 (937) 512-2509
www.sinclair.edu/engagement
Student and Community Engagement provides students with a wide variety of resources ranging from leadership development opportunities to resources for connecting to local employment opportunities. The office is also responsible for a variety of student activities, campus
clubs, and other organizations. This department serves as a resource for employers who are seeking to connect with and recruit students through job postings, career fairs, or other on-campus activities.

## Student Enrichment Programs

Building 19, Room 19103•(937) 512-5231• www.sinclair.edu/about/offices/sep

The Student Enrichment Programs at Sinclair collaborate with schools and other community stakeholders to provide programming and support that increase access to college and build a foundation for career readiness and completion of a college certificate or degree. This is achieved through the design and delivery of high-quality, studentcentered programs that create synergy between in-class and out-of-class learning. This department believes that through education ALL students will achieve their dreams.

## Tartan Tops

## (937) 512-2309• accessibility@sinclair.edu

The TOPS Program will provide an educational/career pathway for part-time students who have an intellectual disability. Students completing the pathway will receive an Academic Career Readiness and Training credential. The general education courses taken as part of this program will assist students with developing the skills needed for academic and career success. Students will complete two semesters of internship experiences to prepare them to enter the workforce.

## Tutoring \& Learning Center

## Library, Room 7L07•(937) 512-2792•www.sinclair.edu/tlc

The Tutoring \& Learning Center is the centralized location for academic support on campus. The mission of the Tutoring \& Learning Center is to empower students through quality tutoring. Services are free to currently enrolled students. The Tutoring \& Learning Center provides support for over 200 courses. Students can self-schedule on the TLCs website to meet with a tutor either face-to-face or virtually.

## Work-based Learning

## Building 11, Room $10346 \cdot$ Dayton Campus • (937) 512-2769• www.sinclair.edu/work-based-learning

Work-based Learning (WBL) integrates the school curriculum with the workplace to provide students with real-life work experiences where they can apply academic and technical skills to develop their employability. More than 25 programs at Sinclair require students to earn internship credit to complete their degree. Staff within the office of WBL provide students with the assistance they need in acquiring internships in the community, whether the internship is required or not.

## Workforce Development

Building 11, Room 11346 • Dayton Campus • (937) 252-9787 workforcedevelopment@sinclair.edu • workforce.sinclair.edu

Sinclair Workforce Development partners with the Dayton region's industry leaders to provide professional development and training solutions that empower organizational and personal growth. We offer a wide array of innovative programs and services in manufacturing, healthcare, information technology, and leadership and organizational development, as well as industry-recognized credentials, online learning and more. We welcome the opportunity to help you enrich, elevate, and empower your workforce.

## Articulation and Transfer Policies

## Articulation and Transfer Policies for Degree-Seeking Students

Begin a four-year degree by taking advantage of Sinclair's small class size, caring faculty, supportive staff and low tuition.

## Students can:

- Complete many freshman and sophomore level courses before transferring to a four-year institution.
- Earn a Sinclair associate degree and apply many of those credits toward a bachelor's degree.
- Complete most of the general education requirements by taking courses from the Ohio Transfer 36 before transferring to a four-year institution.
Transfer to and from Sinclair by following a few easy steps. Be sure to check with a Sinclair academic advisor and the transfer institution.


## Transfer of Credit to Sinclair

To make sure that credits from another institution transfer efficiently to Sinclair, follow these steps:

## 1. Request Official Transcripts

Contact all previously attended colleges/universities and request that official transcripts be sent to: Sinclair Community College, Registration \& Student Records, 444 West Third Street, Dayton, Ohio 45402-1460
Upon receipt of a student's transcript, Sinclair will notify the student with a post card via U.S. mail. Within 15 business days the Student Records department will equate the transferred courses to Sinclair courses and a full report of these equivalencies will be sent to the student in the mail. Sinclair accepts credits from colleges and universities accredited by regional accrediting associations.

## 2. Meet with an Academic Advisor

Advisors will work with students to determine which courses to take for their degree programs. If all transcripts have not been received by Sinclair prior to meeting with advisors, students are encouraged to bring an unofficial transcript from their previously attended college(s) to the advising session.

## 3. Register for Classes

## Transfer of Credits from Sinclair

To make sure that Sinclair credits transfer efficiently to another institution (referred to here as "transfer institution"), follow these steps:

1. Meet with the appropriate Sinclair academic/faculty advisor and speak with a representative at the transfer institution early and often during an academic career. This will help ensure that the student is selecting the appropriate courses.
2. Follow the transfer admissions procedures for that institution.
3. Have official Sinclair transcripts sent to the transfer institution and follow up to ensure that they have received and evaluated the transfer credits.

- For additional information, go to: www.sinclair.edu/transcripts


## Remember:

- Speak with an academic/faculty advisor early in your academic career. It is the student's responsibility to keep the advisor aware of the intended academic program and/or transfer institution.
- Contact the transfer institution as soon as possible. Ask for specific recommendations from the transfer institution to help with structuring a degree program at Sinclair as closely as possible around their requirements. Also, speaking to advisors from both institutions helps ensure that students receive timely, accurate transfer information.
- Always confirm course choices with the transfer institution. Because Sinclair is accredited by the Higher Learning Commission and is a member of the association as well as the Ohio Department of Higher Education, most credits will transfer to other colleges and universities. University Parallel courses usually transfer more easily than technical courses. Due to the highly specialized nature of courses in career programs, many are not designed for transfer to a four-year institution. The exception to this is any course in an approved articulation agreement with a four-year college or university. An academic advisor can provide information about which programs offer this option.


## Institutional Transfer

The Ohio Department of Higher Education in 1990, following a directive of the 118th Ohio General Assembly, developed the Ohio Articulation and Transfer Policy to facilitate students' ability to transfer credits from one Ohio public college or university to another in order to avoid duplication of course requirements. A subsequent policy review and recommendations produced by the Articulation and Transfer Advisory Council in 2004, together with mandates from the 125th Ohio General Assembly in the form of Amended Substitute House Bill 95, have prompted improvements of the original policy. Additional legislation from the 125th Ohio General Assembly also initiated the development of a statewide system for articulation agreements among state institutions of higher education for transfer students pursuing teacher education programs.

Action by the 126th Ohio General Assembly led to the establishment of criteria, policies, and procedures for the transfer of technical courses completed through a career-technical education institution; and standards for the awarding of college credit based on Advanced Placement (AP) test scores.

Legislation from the 130th Ohio General Assembly required public institutions of higher education to: use baseline standards and procedures in the granting of college credit for military training, experience, and coursework; establish an appeals process for resolving
disputes over the awarding of credit for military experience; provide specific assistance and support to veterans and service members; adopt a common definition of a service member and veteran; and establish a credit articulation system in which adult graduates of public careertechnical institutions who complete a 900 clock-hour program of study and obtain an industry-recognized credential approved by the Chancellor shall receive 30 college technical credit hours toward a technical degree upon enrollment.

While all public colleges and universities are required to follow the Ohio Articulation and Transfer Policy, independent colleges and universities in Ohio may or may not participate in the Transfer Policy. Therefore, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements. In support of improved articulation and transfer processes, the Ohio Department of Higher Education has established an articulation and transfer clearinghouse to receive, annotate, and convey transcripts among public colleges and universities. This system is designed to provide standardized information and help colleges and universities reduce undesirable variability in the transfer credit evaluation process.

## Acceptance of Transfer and Articulated Credit

To recognize courses appropriately and provide equity in the treatment of incoming transfer students and students native to the receiving institution, transfer credit will be accepted for all successfully completed college-level courses completed in or after Fall 2005 from Ohio public institutions of higher education. Students who successfully completed Associate of Arts (AA) or Associate of Science (AS) degrees prior to Fall 2005 with a 2.0 or better overall grade-point average would also receive credit for all college-level courses they have passed. While this reflects the baseline policy requirement, individual institutions may set equitable institutional policies that are more accepting.

Pass/Fail courses, credit-by-examination credits, experiential learning courses, and other non-traditional credit courses that meet these conditions will also be accepted and posted to the student record.

## Application of Transfer and Articulated Credit

Application of credit is the decision process performed by the receiving institution to determine how the credits it has accepted and recorded on the student's official academic transcript will or will not apply toward program and degree requirements. While the receiving institution makes this decision, it will do so within the parameters of this Policy.

The following guidelines and requirements shall govern the application of transfer and articulated credit:

## Ohio Transfer 36 (formerly the Ohio Transfer Module (OTM))

The Ohio Department of Higher Education's Articulation and Transfer Policy established the Ohio Transfer 36, which may be a subset or the entire set of a public higher education institution's general education curriculum in Associate of Arts (AA), Associate of Science (AS) and baccalaureate degree programs. Students in applied associate degree programs may complete some individual Ohio Transfer 36 courses within their degree program or continue beyond the degree program to complete the entire Ohio Transfer 36. The Ohio Transfer 36 contains

36-40 semester of course credit in English composition (minimum of 3 semester); mathematics, statistics and logic (minimum of 3 semester); arts and humanities (minimum of 6 semester); social and behavioral sciences (minimum of 6 semester); and natural sciences (minimum of 6 semester). Oral communication, Diversity, Equity, and Inclusion (DEI), and interdisciplinary areas may be included as additional options. Additional elective hours from among these areas make up the total hours for a completed Ohio Transfer 36. Courses for the Ohio Transfer 36 should be 100 - and 200 -level general education courses commonly completed in the first two years of a student's course of study. Each public university and technical and community college is required to establish and maintain an approved Ohio Transfer 36.

Ohio Transfer 36 course(s) or the full module completed at one college or university will automatically meet the requirements of individual Ohio Transfer 36 course(s) or the full Ohio Transfer 36 at another college or university once the student is admitted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer. For example, a student who completes the Ohio Transfer 36 at Institution S (sending institution) and then transfers to Institution R (receiving institution) is said to have completed the Ohio Transfer 36 portion of Institution R's general education program. Institution $R$, however, may have general education courses that go beyond its Ohio Transfer 36 . State policy initially required that all courses in the Ohio Transfer 36 be completed to receive its benefit in transfer. However, subsequent policy revisions have extended this benefit to the completion of individual Ohio Transfer 36 courses on a course-by-course basis.

A complete list of approved OT36 courses for Sinclair can be viewed at: https://reports-cems.transfercredit.ohio.gov

## Transfer Assurance Guides

Transfer Assurance Guides (TAGs) courses are pre-major/beginning major courses that have been identified as common requirements across public bachelor's degree programs. They are guaranteed to transfer and apply to specific TAG-related degree/program requirements as equivalent courses.

TAGs identify common major course work that is guaranteed to transfer. Students may elect to complete the full TAG or any subset of courses from the TAG. Because of specific major requirements, early identification of a student's intended major is encouraged.

A complete list of approved TAG courses for Sinclair can be viewed at: https://reports-cems.transfercredit.ohio.gov

## Career-Technical Assurance Guides

Collaboration among the Ohio Department of Higher Education, the Ohio Department of Education, and other key stakeholders led to the development of policies and procedures to create statewide careertechnical discipline specific articulation agreements and further ensure that students completing coursework at an adult or secondary careertechnical institution can articulate and transfer agreed-upon technical courses/programs to any Ohio public institution of higher education and among Ohio public institutions of higher education "without unnecessary duplication or institutional barriers."

Career-Technical Assurance Guides (CTAGs) are statewide articulation agreements that guarantee the recognition of learning which occurs at public adult and secondary career-technical institutions and have the opportunity for the award of college credit toward technical courses/programs at any public higher education institution. CTAGs serve as advising tools, identifying the statewide content guarantee and describing other conditions or obligations (e.g., program accreditation or industry credential) associated with the guarantee.

A complete list of approved CTAG courses for Sinclair can be viewed at: https://reports-cems.transfercredit.ohio.gov

## Industry Recognized Credential Transfer Assurance Guides

Industry Recognized Credential Transfer Assurance Guides (ITAGs) are a statewide transfer initiative that guarantees the awarding of college-level credit to students who earn agreed-upon, industryrecognized credentials. The award of credit is based upon the knowledge, skills, and competencies gained through credential attainment, regardless of where the learning to prepare for the credential took place.

The approved ITAG courses for Sinclair can be viewed here https://www.sinclair.edu/about/offices/provost/articulation-transfer/industry-recognized-credential-transfer-assurance-guides-itags/

## Military Transfer Assurance Guides

In response to the legislative requirement (Ohio Revised Code 3333.164 ) to create a military articulation and transfer assurance guide for college-level learning that took place through military training, experience, and coursework, college credit will be granted to students with military training, experience, and/or coursework that is recognized by the American Council on Education (ACE) or a regionally accredited military institution, such as Community College of the Air Force

In order to streamline the awarding, transferability, and applicability of college credit, service members and veterans are guaranteed to earn certain types of credit(s) or course(s) as specified in the Military Transfer Assurance Guides (MTAGs), which are based on the endorsed baseline standards and procedures by the Chancellor. Equivalent course(s), credits for courses, or block of credit is to be awarded and applied towards general education and/or major course requirements at the receiving institution in accordance with the MTAG guarantee. There is some training, experience, and coursework that the receiving institution may be able to award college credit only toward general or free electives.

In addition, public institutions of higher education shall ensure that appropriate equivalent credit is awarded for military training, experience, and coursework that meet the baseline standards and procedures according to the Ohio Revised Code 3333.164. This requirement goes beyond credit/course awarded based on the MTAG alignment process.

A complete list of approved MTAG courses can be viewed at: https://transfercredit.ohio.gov

## Ohio Guaranteed Transfer Pathways

The Ohio Guaranteed Transfer Pathways (OGTPs) are designed to provide a clear path for students pursuing an associate degree at Ohio community colleges who plan to transfer to an Ohio public university to complete a bachelor's degree in an equivalent field. The OGTPs constitute an agreement between public community colleges and universities confirming that community college courses meet major preparation requirements and will be counted and applied toward the bachelor's degree. Students still must meet all university program admission requirements.

A student who completes all of the coursework within a major-specific Ohio Guaranteed Transfer Pathway (OGTP) will be eligible to earn an associate degree from an Ohio public community college. Successful completion of the OGTP will be recorded on the student's transcript, and upon transfer to an Ohio public university, the student should receive junior standing and all coursework taken as part of the pathway will transfer to the university toward the completion of a bachelor's degree in an equivalent field. OGTP builds upon the existing statewide credit transfer guarantees including the Ohio Transfer 36, Transfer Assurance Guides, Military Transfer Assurance Guides, and CareerTechnical Assurance Guides.

OGTPs can be found on the Ohio Department of Higher Education's website at https://www.ohiohighered.org/OGTP.

## Apprenticeship Pathway Programs

The Apprenticeship Pathways initiative advocates for individuals completing apprenticeships by incorporating their learning into academic credit, thereby saving them time and money and encouraging them to advance their academic credentials to contribute to a strong, educated workforce.

Ohio apprenticeship programs partner with public two-year institutions to provide technology-specific statewide articulation agreements that recognize non-traditional prior learning. College credit is awarded toward a technical associate degree. Each agreement simplifies student advising by outlining how apprenticeship training in a certain pathway applies to an applied associate degree and lists remaining courses required to complete the degree. The application of the credit toward a technical associate degree in these agreements is guaranteed at the participating receiving institutions.

## Advanced Placement (AP) Exams

The State of Ohio, working with public institutions of higher education, has initiated policies to facilitate the ease of transition from high school to college, as well as between and among Ohio's public colleges and universities.

Beginning in the Fall term 2009:
Students obtaining an Advanced Placement (AP) exam score of 3 or above will be awarded the aligned course(s) and credits for the AP exam area(s) successfully completed.

General Education courses and credits received will be applied towards graduation and will satisfy a general education requirement if the course(s) to which the AP area is equivalent fulfill(s) a requirement.

If an equivalent course is not available for the AP exam area completed, elective or area credit will be awarded in the appropriate academic discipline and will be applied towards graduation where such elective credit options exist within the academic major.

Additional courses or credits may be available when a score of 4 or 5 is obtained. Award of credit for higher score values varies depending on the institution and academic discipline.

In academic disciplines containing highly dependent sequences (Sciences, Technology, Engineering and Mathematics - STEM) students are strongly advised to confer with the college/university advising staff to ensure they have the appropriate foundation to be successful in advanced coursework within the sequence.

A complete list of approved AP courses for Sinclair can be viewed at: https://reports-cems.transfercredit.ohio.gov

## One-Year Option Credit Award

The One-Year Option builds upon Ohio's articulation and transfer system to help more adults accelerate their preparation for work by earning a technical associate degree. Consistent with the philosophy of the Career-Technical Assurance Guides (CTAGs), the One-Year Option guarantees that college credit will be awarded for college-level learning that occurs through adult programs at public career-technical institutions.

Adults who complete a career-technical education program of study consisting of a minimum of 900 clock-hours and achieve an industryrecognized credential approved by the Chancellor shall receive thirty (30) semester hours of technical course credit toward a standardized Associate of Technical Study Degree (ATS) upon matriculation at a public institution of higher education that confers such a degree. The 30 semester hours will be awarded as a block of credit rather than credit for specific courses. Proportional credit is to be awarded toward the ATS degree for adults who complete a program of study between 600 and 899 clock hours and achieved an industry-recognized credential approved by the Chancellor.

The credit earned through the One-Year Option will be applied to ATS degrees bearing the following standardized degree titles:

1. Associate of Technical Study in Building and Industrial Technology
2. Associate of Technical Study in Business Technology
3. Associate of Technical Study in Health and Allied Health Technology
4. Associate of Technical Study in Information Technology
5. Associate of Technical Study in Services Technology

## College-Level Examination Program (CLEP)

The State of Ohio, working with public institutions of higher education and statewide faculty panels, has developed policies to recognize students' prior learning and to facilitate the articulation and guaranteed transfer of such learning between Ohio's public colleges and universities.

College credit is guaranteed for students who achieve an established College-Level Examination Program (CLEP) test score for exams that have been endorsed statewide as college level. Statewide faculty panels
aligned CLEP exams to equivalent Ohio Transfer 36 and Transfer Assurance Guide (TAG) courses, as appropriate. If an equivalent course is not available for the CLEP exam area, by default, endorsed elective or area credit will still be awarded and applied towards graduation.

Specific endorsed alignments and scores for individual CLEP exams that are outlined in the College- Level Examination Program (CLEP) Endorsed Alignment Policies document are available on the Ohio Department of Higher Education website at
https://www.ohiohighered.org/transfer/clep.

## Conditions for Transfer Admission

1. Graduates who are considered transfer students under the Integrated Postsecondary Education Data System (IPEDS) definition with associate degrees from Ohio's public institutions of higher education and a completed, approved Ohio Transfer 36 shall be admitted to a public institution of higher education in Ohio, provided their cumulative gradepoint average is at least 2.0 for all previous college-level courses and and other institutional admission criteria, such as space availability, adherence to deadlines, payment of fees, and grade-point average that are fairly and equally applied to all undergraduate students, have also been satisfied. Further, these students shall have admission priority over graduates with an out-of-state associate degree and other transfer students with transferable and/or articulated college credit.
2. Associate degree holders who are considered transfer students under the IPEDS definition and have not completed the Ohio Transfer 36 from an Ohio public institution of higher education will be eligible for preferential consideration for admission as transfer students as long as the institution's admission criteria, such as the minimum academic standards, space availability, adherence to deadlines, and payment of fees, are fairly and equally applied to all undergraduate students.
3. In order to encourage completion of the baccalaureate degree, students who are not enrolled in or who have not earned an degree but have earned 60 semester/ 90 quarter hours or more of credit toward a baccalaureate degree with a cumulative grade-point average of at least a 2.0 for all previous collegelevel courses will be eligible for preferential consideration for admission as transfer students as long as the institution's admission criteria, such as the minimum academic standards, space availability, adherence to deadlines, and payment of fees, are fairly and equally applied to all undergraduate students.
4. Students who have not earned an associate degree or who have not earned 60 semester/ 90 quarter hours of credit with a grade-point average of at least a 2.0 for all previous collegelevel courses will be eligible for admission as transfer students on a competitive basis.
5. Incoming transfer students admitted to a college or university shall compete for admission to selective programs, majors, and units on an equal basis with students native to the receiving institution.
The admission of transfer students by an institution, however, does not guarantee admission to any majors, minors, or fields of concentration at the institution. Some programs have additional academic and nonacademic requirements beyond those for general admission to the
institution (e.g., background check, a grade-point average higher than a 2.0, or a grade-point average higher than the average required for admission to the institution). Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as native students. Furthermore, transfer students shall be accorded the same class standing and other privileges as native students on the basis of the number of credits earned. All residency requirements must be completed at the receiving institution.

## Responsibilities of Students

To maximize transfer credit application, prospective transfer students must take responsibility for planning their course of study to meet both the academic and non-academic requirements of the institution to which they desire to articulate or transfer credit as early as possible. The student is responsible to investigate and use the information, advising, and other available resources to develop such a plan. Students should actively seek program, degree, and transfer information; meet with an advisor from both the current and receiving institutions to assist them in preparing a course of study that meets the academic requirements for the program/degree to which they plan to transfer; use the various electronic course/program transfer and applicability database systems, including Ohio Transfer to Degree Guarantee web resources; and select courses/programs at their current institution that satisfy requirements at the receiving institution to maximize the application of transfer credit. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are foreign language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will better articulate with the receiving institution's major.

## Appeals Process

Following the evaluation of a student transcript from another institution, the receiving college institution will provide the student with a Statement of Transfer and Articulated Credit Applicability (Degree Audit Report). A student disagreeing with the application of transfer and/or articulated credit by the receiving institution must file his/her appeal in writing within ninety (90) days of receipt of the Statement of Transfer and Articulated Credit Applicability. The institution shall respond to the appeal within thirty (30) days of the receipt of the appeal at each appeal level.

## Student Complaints Following Transfer Appeals at the Receiving Institution

After a student exhausts the appeals process at the receiving institution and chooses to pursue further action, the Ohio Department of Higher Education (ODHE) responds to formal written complaints related to Ohio Articulation and Transfer Policy against public, independent nonprofit, and proprietary institutions of higher education in Ohio. While the ODHE has limited authority over colleges and universities and cannot offer legal advice or initiate civil court cases, staff will review written complaints submitted through its established process and work with student complainants and institutions.

## Articulation Agreements

Articulation agreements are formal agreements between organizations detailing the recognition of college credit between those organizations. Sinclair uses articulation agreements as a means to avoid duplication of resources and to encourage and enhance students' interest in postsecondary education and transfer from one institution to another. The college has developed articulation agreements with secondary schools, hospitals, professional organizations, and colleges and universities.

Articulation agreements can be categorized in two ways:

- Incoming agreements with secondary schools, hospitals and professional organizations indicate how credits will be recognized at Sinclair Community College. Known as articulated credit, information regarding this option can be requested from an Academic Advisor by calling (937) 5123700 or emailing plaprograms@sinclair.edu.
- Outgoing agreements with other colleges and universities indicate how Sinclair Community College programs and courses will transfer to those institutions. Information regarding current agreements can be viewed at: www.sinclair.edu/agreements


## Transferology ${ }^{\text {TM }}$

Students who have completed courses in higher education and want to know which colleges and universities will accept those courses and apply them to a degree should visit: www.transferology.com

Transferology will provide quick answers from hundreds of institutions in a streamlined and dynamic interface.

## General Education

Sinclair Community College believes every educated person should possess a set of basic, common knowledge, skills and attitudes. Through Sinclair's courses and programs of study, a student acquires breadth of knowledge and gains competence to achieve independent intellectual inquiry. Upon completion of the associate degree at Sinclair, the student will be able to demonstrate the following six general education outcomes:

1. Oral Communication: the creation of common understanding through the use of verbal and nonverbal messages in a variety of contexts.
2. Written Communication: the creation of understanding through composition and synthesis of the written word.
3. Information Literacy: the ability to effectively locate, evaluate, and use information.
4. Critical Thinking: the application of higher order analytical and creative cognitive processes.
5. Cultural Diversity and Global Citizenship: the ability to apply knowledge of cultural diversity to real world context by acknowledging, understanding, and engaging constructively within the contemporary world.
6. Mathematical Reasoning and Problem Solving: the application of quantitative problem-solving skills to the mathematical modelling, analysis and interpretation of realworld problems.
Note: For programs that require a multicultural elective, the following Ohio Transfer Module courses meet the multicultural requirement.

- Multicultural Electives


## Statewide Transfer Initiatives

- Career-Technical Assurance Guides (CTAGs)
- Industry-recognized Credential Transfer Assurance Guides (ITAGs)
- Military Transfer Assurance Guides (MTAGs)
- Ohio Consortium for Transfer Pathways to the Liberal Arts
- Ohio Guaranteed Transfer Pathways
- Ohio Transfer 36
- Multicultural Electives
- Report Problems Transferring Credit
- Transfer Assurance Guides (TAGs)


## Ohio Transfer 36

Ohio Transfer 36 is a subset or a complete set of general education requirements at Ohio public colleges and universities. Courses are guaranteed to transfer to any of Ohio's public institutions of higher education. Ohio Transfer 36 represents a common body of knowledge and academic skills and is comprised of 36 semester hours of courses in the following areas:

- English Composition/Oral Communication (Minimum of 3 credit hours)
- Mathematics, Statistics \& Logic (Minimum of 3 credit hours)
- Natural Sciences (Minimum of 6 credit hours - one lab course required)
- Social \& Behavioral Sciences (Minimum of 6 credit hours from two disciplines)
- Arts \& Humanities (Minimum of 6 credit hours from two disciplines)
The additional 12 credit hours should be chosen based on a student's academic interests.

English/Oral Communication
Mathematics, Statistics and Logic
Natural Sciences
Social and Behavioral Sciences
Arts and Humanities

Note: For programs that require a multicultural elective, the following Ohio Transfer Module courses meet the multicultural requirement.

- Multicultural Electives


## Transfer Assurance Guides (TAGs)

TAGs are courses that move beyond general education (OT36) into pre-major and major courses. TAGs are developed, approved, and monitored by Ohio's public institutions for higher education. Courses in a TAG are guaranteed to transfer and apply directly to the major. The approved TAG courses for Sinclair Community College are as follows:

## Required Courses

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- ALH 2220 - Pathophysiology
- ART 1101-2-D Foundations
- ART 1102-3-D Foundations
- ART 1111 - Drawing I
- ART 1121 - Beginning Painting I
- ART 1131 - Introduction to Sculpture
- ART 1141 - Introduction to Ceramics
- ART 1161 - Black \& White Darkroom Photography I
- ART 2216 - Life Drawing \& Anatomy I
- ART 2230 - Art History: Ancient through Medieval Periods
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 2269 - Printmaking I
- ASL 1111 - Beginning American Sign Language I
- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- BIS 1221 - Specialized Computer Applications for Health Information Management
- CAT 1201 - Construction Methods \& Materials
- CAT 1211 - Construction Materials Testing
- CAT 1431 - OSHA Construction Standards 10 Hour
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2421 - Soil Mechanics
- CHE 1211 - General Chemistry I
- CHE 1221-General Chemistry II
- CHE 2111 - Organic Chemistry I
- CHE 2121 - Organic Chemistry II
- CHN 1101 - Elementary Chinese I
- CHN 1102 - Elementary Chinese II
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1125 - Policing
- CJS 1165 - Corrections
- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2220 - Introduction to Communication Theory
- COM 2225 - Small Group Communication
- DIT 1525 - Human Nutrition
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2735 - Foodservice Retail Business Management \& Mid-Program Assessment
- ECE 2200 - Families, Communities \& Schools
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- EDU 1100 - Introduction to Education
- EDU 1105 - Individuals with Exceptionalities
- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EGV 1101 - Alternate \& Renewable Energy Sources
- EGV 2101 - Solar Photovoltaic Design \& Installation
- EGV 2151 - Solar Thermal Systems
- ENG 1131 - Business Writing
- GEO 1101 - Global Forces, Local Diversity
- GEO 1102 - Earth's Physical Environment
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1201 - World Regional Geography: People, Places \& Globalization
- GEO 1209 - Map Design \& Visualization
- GLG 1101 - Physical Geology
- GLG 1201 - Historical Geology
- HIM 1101 - Medical Terminology
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIS 1101 - United States History I
- HIS 1102 - United States History II
- HIS 1111 - Western Civilization I
- HIS 1112 - Western Civilization II
- HMT 1112 - Food Principles \& Basic Preparation
- LAW 1101 - Business Law
- LIT 2201 - British Literature I
- LIT 2202 - British Literature II
- LIT 2211 - American Literature I
- LIT 2212 - American Literature II
- LIT 2220 - Introduction to Literature
- LIT 2236 - African-American Literature
- MAT 2170 - Business Statistics I
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- MAT 2320 - Linear Algebra
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 2151 - Material Science
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2301 - Fluid Mechanics
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MUS 1111 - Music Theory I
- MUS 1112 - Aural Skills I
- MUS 1113 - Music Theory II
- MUS 1114 - Aural Skills II
- MUS 1115- Piano for Music Majors I
- MUS 1116 - Piano for Music Majors II
- MUS 1131 - Chorale
- MUS 1141 - Wind Symphony
- MUS 1143 - Concert Band
- MUS 1145-Classical Guitar Ensemble
- MUS 2111 - Music Theory III
- MUS 2112 - Aural Skills III
- MUS 2113 - Music Theory IV
- MUS 2114 - Aural Skills IV
- MUS 2500 - Applied Piano for Majors I
- MUS 2501 - Applied Piano for Majors II
- MUS 2502 - Applied Voice for Majors I
- MUS 2503 - Applied Voice for Majors II
- MUS 2504 - Applied Classical Guitar for Majors I
- MUS 2505 - Applied Classical Guitar for Majors II
- MUS 2506 - Applied Flute for Majors I
- MUS 2507 - Applied Flute for Majors II
- MUS 2508 - Applied Clarinet for Majors I
- MUS 2509 - Applied Clarinet for Majors II
- MUS 2510 - Applied Saxophone for Majors I
- MUS 2511 - Applied Saxophone for Majors II
- MUS 2512 - Applied Oboe for Majors I
- MUS 2513 - Applied Oboe for Majors II
- MUS 2514 - Applied Bassoon for Majors I
- MUS 2515 - Applied Bassoon for Majors II
- MUS 2516 - Applied Trumpet for Majors I
- MUS 2517 - Applied Trumpet for Majors II
- MUS 2518 - Applied French Horn for Majors I
- MUS 2519 - Applied French Horn for Majors II
- MUS 2520 - Applied Baritone Horn for Majors I
- MUS 2521 - Applied Baritone Horn for Majors II
- MUS 2522 - Applied Trombone for Majors I
- MUS 2523 - Applied Trombone for Majors II
- MUS 2524 - Applied Tuba for Majors I
- MUS 2525 - Applied Tuba for Majors II
- MUS 2526 - Applied Violin for Majors I
- MUS 2527 - Applied Violin for Majors II
- MUS 2528 - Applied Viola for Majors I
- MUS 2529 - Applied Viola for Majors II
- MUS 2530 - Applied Cello for Majors I
- MUS 2531 - Applied Cello for Majors II
- MUS 2532 - Applied String Bass for Majors I
- MUS 2533 - Applied String Bass for Majors II
- MUS 2534 - Applied Percussion for Majors I
- MUS 2535 - Applied Percussion for Majors II
- PHI 2205 - Introduction to Philosophy
- PHI 2206 - Introduction to Ethics
- PHY 1141-College Physics I
- PHY 1142 - College Physics II
- PHY 2201 - General Physics I
- PHY 2202 - General Physics II
- PLS 1120-American Federal Government
- PLS 1232 - State \& Local Government
- PLS 2200 - Political Life, Systems \& Issues
- PLS 2220 - International Relations
- PSY 1100-General Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2217 - Abnormal Psychology
- PSY 2220 - Personality Psychology
- PSY 2225 - Social Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2205 - Social Problems
- SOC 2215 - Race \& Ethnicity
- SOC 2226 - Criminology
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- THE 1106 - Stagecraft
- THE 1107- Lab for Stagecraft
- THE 1111 - Acting I
- THE 1194 - Applied Theatre Technology I
- THE 2206 - Script Analysis


## Career-Technical Assurance Guides (CTAGs)

Students who successfully complete specified technical programs at Ohio secondary and adult career-technical institutions are eligible to have technical credit transfer to public colleges and universities. This transfer of credit is described in Career-Technical Assurance Guides (CTAG). CTAGs are advising tools that assist students moving from Ohio secondary and adult career-technical institutions to Ohio public institutions of higher education. The approved CTAG courses for Sinclair Community College are as follows:

## Required Courses

- ACC 1210 - Introduction to Financial Accounting (CTBU010)
- ACC 1220 - Introduction to Managerial Accounting (CTBU011)
- AUT 1102 - Introduction to Automotive Service (CTAUT005)
- AVT 1101 - Introduction to Unmanned Aerial Systems AND
- AVT 1103 - Remote Pilot Ground School (CTAIR006)
- AVT 1105 - Orientation to Aviation (CTAIR004)
- AVT 1119 - Aviation Meteorology (CTAIR003)
- AVT 2146 - Introduction to Airline Operations (CTAIR001)
- BIS 2180 - Medical Office Simulation (CTMMS01)
- BTN 1110 - Biotechnology \& Bioethics (CTBTC001)
- CAT 1141 - Reading Architectural Drawings (CTCON001)
- CAT 1201 - Construction Methods \& Materials (CTCON003)
- CAT 1431 - OSHA Construction Standards 10 Hour (CTS001)
- CAT 2431 - OSHA Construction Standards (CTCON002)
- CIS 1107 - Introduction to Operating Systems (CTIT005)
- CIS 1111 - Introduction to Problem Solving \& Computer Programming (CTPROG001)
- CIS 1130 - Network Fundamentals (CTIT002)
- CIS 1202 - C++ Software Development (CTPROG003)
- CIS 1510 - Windows Client Operating System (CTIT011)
- CIS 2212 - Java Software Development I (CTPROG002)
- CIS 2510 - Microsoft Windows Server Operating System (CTIT013)
- CIS 2550 - Linux Operating System (CTIT016)
- CIS 2640 - Network Security (CTIT015)
- CIS 2711 - Enterprise Desktop Support Technician (CTIT006)
- CIS 2731 - A+ Hardware \& Software (CTIT014)
- CJS 1101 - Introduction to Criminal Justice Science (CTCJ001)
- CLT 1200 - Introduction to Clinical Laboratory (CTMLT001)
- DAS 1206 - Dental Assisting Radiography (CTDA002)
- DAS 1207 - Lab Dental Assisting Radiography (CTDA002)
- ECE 1100 - Introduction to Early Childhood Education (CTECE001)
- ECE 1202 - Healthy \& Safe Environments (CTECE002)
- ECE 2302 - Infant \& Toddler Curriculum (CTECE003)
- EDU 1100 - Introduction to Education (CTEDU007)
- EET 1131 - Digital Electronics (CTEET002)
- EET 1150 - DC Circuits (CTEET001)
- EET 2281 - Programmable Logic Controllers (CTEET003)
- EGV 1101 - Alternate \& Renewable Energy Sources (CTAE001)
- EGV 2101 - Solar Photovoltaic Design \& Installation (CTSP001)
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory (CTEMS001)
- EMS 1150 - Emergency Medical Technician: Lecture (CTEMS002)
- EMS 1155 - Laboratory for Emergency Medical Technician (CTEMS002)
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for Emergency Medical Services Provider (CTEMS004)
- EMS 2105 - Paramedic 1: Lecture (CTEMS004)
- EMS 2110 - Paramedic 1: Laboratory (CTEMS004)
- EMS 2125 - Paramedic 2: Lecture (CTEMS004)
- EMS 2130 - Paramedic 2: Laboratory (CTEMS004)
- EMS 2135 - Paramedic 2: Clinical (CTEMS004)
- EMS 2150 - Paramedic 3: Lecture (CTEMS004)
- EMS 2155 - Paramedic 3: Laboratory (CTEMS004)
- EMS 2160 - Paramedic 3: Clinical (CTEMS004)
- EMS 2175 - Paramedic 4: Lecture (CTEMS004)
- EMS 2180 - Paramedic 4: Field Experience (CTEMS004)
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture (CTEMS004)
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory (CTEMS004)
- ENS 1116 - Exercise Science \& Health Promotion (CTES001)
- ENS 1118 - Lifetime Physical Fitness \& Wellness (CTES002)
- FIN 2450 - Personal Finance (CTPF001)
- HIM 1101 - Medical Terminology (CTMT001)
- HIM 1110 - Health Information Processing (CTHIM001)
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records (CTHIM002)
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry (CTCF002)
- HMT 1107 - Sanitation \& Safety (CTCF001)
- HMT 1129 - Restaurant Desserts (CTCF010)
- HMT 1137 - Hospitality Industry Computer Systems (CTCF007)
- HMT 2226 - Hospitality Purchasing \& Negotiations (CTCF009)
- LAW 1101 - Business Law (CTBU004)
- MAN 2159 - Supply Chain Management Concepts \& Applications (CTSCM001)
- MET 1231 - Introduction to Engineering Design Using 3D CAD (CTMET005)
- MHT 1101 - Introduction to Mental Health Services (CTBH001)
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary (CTBH002)
- MRK 2102 - Principles of Advertising (CTVDI002)
- VIS 1420 - Video Production (CTIM006)


## Industry Recognized Credential Transfer Assurance Guides (ITAGs)

ITAGs are a statewide transfer initiative that guarantees the awarding of college-level credit to students who earn agreed-upon, industryrecognized credentials. The award of credit is based upon the knowledge, skills, and competencies gained through credential attainment, regardless of where the learning to prepare for the credential took place. The approved ITAG courses for Sinclair Community College are as follows:

## Required Courses

- AUT 1102 - Introduction to Automotive Service
- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1110 - Private Pilot Ground School
- AVT 1124 - Private Pilot Flight Lab - Airplane Single Engine
- CIS 1130 - Network Fundamentals
- CIS 2640 - Network Security
- ECE 1100 - Introduction to Early Childhood Education
- ECE 1202 - Healthy \& Safe Environments
- EET 2281 - Programmable Logic Controllers
- HMT 1107 - Sanitation \& Safety
- MET 1231 - Introduction to Engineering Design Using 3D CAD


## Military Transfer Assurance Guides (MTAGs)

In order to streamline the awarding, transferability, and applicability of college credit, service members and veterans are guaranteed to earn certain types of credit(s) or course(s) as specified in the Military Transfer Assurance Guides (MTAGs). The approved MTAG courses for Sinclair Community College are as follows:

## Required Courses

- AVT 1119 - Aviation Meteorology
- CAT 1201 - Construction Methods \& Materials
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2421 - Soil Mechanics
- CIS 1130 - Network Fundamentals
- CIS 1411 - Introduction to Networks
- CIS 1510 - Windows Client Operating System
- CIS 2416 - Routing \& Switching Essentials
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2640 - Network Security
- CIS 2731 - A+ Hardware \& Software
- CIS 2711 - Enterprise Desktop Support Technician
- CJS 1165 - Corrections
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2735 - Foodservice Retail Business Management \& Mid-Program Assessment
- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- GEO 1209 - Map Design \& Visualization
- MUS 1131 - Chorale
- MUS 1141 - Wind Symphony
- MUS 1143 - Concert Band
- MUS 1145 - Classical Guitar Ensemble
- MUS 2500 - Applied Piano for Majors I
- MUS 2501 - Applied Piano for Majors II
- MUS 2502 - Applied Voice for Majors I
- MUS 2503 - Applied Voice for Majors II
- MUS 2504 - Applied Classical Guitar for Majors I
- MUS 2505 - Applied Classical Guitar for Majors II
- MUS 2506 - Applied Flute for Majors I
- MUS 2507 - Applied Flute for Majors II
- MUS 2508 - Applied Clarinet for Majors I
- MUS 2509 - Applied Clarinet for Majors II
- MUS 2510 - Applied Saxophone for Majors I
- MUS 2511 - Applied Saxophone for Majors II
- MUS 2512 - Applied Oboe for Majors I
- MUS 2513 - Applied Oboe for Majors II
- MUS 2514 - Applied Bassoon for Majors I
- MUS 2515 - Applied Bassoon for Majors II
- MUS 2516 - Applied Trumpet for Majors I
- MUS 2517 - Applied Trumpet for Majors II
- MUS 2518 - Applied French Horn for Majors I
- MUS 2519 - Applied French Horn for Majors II
- MUS 2520 - Applied Baritone Horn for Majors I
- MUS 2521 - Applied Baritone Horn for Majors II
- MUS 2522 - Applied Trombone for Majors I
- MUS 2523 - Applied Trombone for Majors II
- MUS 2524 - Applied Tuba for Majors I
- MUS 2525 - Applied Tuba for Majors II
- MUS 2526 - Applied Violin for Majors I
- MUS 2527 - Applied Violin for Majors II
- MUS 2528 - Applied Viola for Majors I
- MUS 2529 - Applied Viola for Majors II
- MUS 2530 - Applied Cello for Majors I
- MUS 2531 - Applied Cello for Majors II
- MUS 2532 - Applied String Bass for Majors I
- MUS 2533 - Applied String Bass for Majors II
- MUS 2534 - Applied Percussion for Majors I
- MUS 2535 - Applied Percussion for Majors II
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II


## Ohio Consortium for Transfer Pathways to the Liberal Arts

Sinclair Community College is a member of the Ohio Consortium for Transfer Pathways to the Liberal Arts, a group of 25 two-year and fouryear colleges working together to provide clear, consistent transfer pathways in biology, English and psychology for community college students transferring from Sinclair to 14 private colleges in Ohio, all of which have approved transfer pathways that align with the Ohio Guaranteed Transfer Pathways (OGTPs). This assures that the pathway you complete as part of your associate degree will provide a clear path with maximum transferrable credit to private colleges and universities across Ohio. You will be able to transfer as a college junior, on track to graduate with your bachelor's degree.

## Ohio Guaranteed Transfer Pathways

The Ohio Guaranteed Transfer Pathways (OGTPs) are designed to provide a clear path to degree completion for students pursuing associate degrees who plan to transfer to an Ohio public university to complete their bachelor's degree. The OGTP's constitute an agreement between public community colleges and universities confirming that community college courses meet major preparation requirements and will be counted and applied toward the bachelor's degree. Students still must meet all university program admission requirements, which in some cases may be competitive.

Students may review all Ohio Guaranteed Transfer Pathways available at every Ohio public college and university on the Ohio Department of Higher Education's Ohio Guaranteed Transfer Pathway website. Students who complete these pathways at Sinclair, will have the designation "OGTP COMPLETED" on their official Sinclair Community College transcript.

## The following are approved Ohio Guaranteed Transfer Pathways for Sinclair Community College:

- Associate of Arts to Philosophy Bachelor of Arts
- Biology Associate of Science to Biology Bachelor of Science
- Business Administration Associate of Science to Business Bachelor of Science
- History Associate of Arts to History Bachelor of Arts
- Mathematics Associate of Science to Mathematics Bachelor of Arts
- Mathematics Associate of Science to Mathematics Bachelor of Science
Please contact your Sinclair Academic Advisor for additional information or if you intend to complete one of the above Ohio Guaranteed Transfer Pathways.


## Report Problems Transferring Credit

The Ohio Department of Higher Education (ODHE) guarantees the transfer of certain courses between Sinclair and Ohio public colleges and universities. In addition, Sinclair has articulation agreements with universities that guarantee transfer of credit.

If you transferred to either an Ohio public university or a private university Sinclair has an articulation with, and you believe your credits were not transferred as guaranteed by either ODHE guarantees or Sinclair articulation agreements, please complete the report at this link: Report Problems Transferring Guaranteed Credits

## Catalog Home

The Sinclair catalog is the official source of information on college programs, curricula and policies, centralized to offer a complete view of academic offerings for each academic year. Use the links above to browse Sinclair's complete list of programs, courses and policies.

## Three ways to locate information

\#1: Type what you are looking for in the "catalog Search" box, located at the top left of this page.
\#2: Click on "Advanced Search" to look for specific courses and/or programs.
\#3: Choose from the navigation bar along the left side of the page.

## Degree Planner

The Degree Planner link allows you to see, save, and/or print all the information about your program of study in a condensed, printable format. To access, simply navigate to any program and click the Degree Planner link at the top right of the page.

## Create Your Personal Portfolio

The My Portfolio feature allows you to save information in your own personal folder so you can go directly to it!

1. Click on the My Portfolio link at the bottom of the left navigation bar.
2. If you are a new user, click Create an Account. You'll type your email address and a password. If you choose not to create an account, your information will only be saved until you close the catalog.
3. Then use the left navigation bar or the search box to find what you are looking for in the catalog.
4. When you want to save a section, click the My Portfolio link at the top right of the page.
5. The next time you go to your portfolio, your saved material will be there!

## Need help?

If at any point you have questions about how to navigate this catalog, just click on the Help link at the top right of the page.

## Programs by Degree

## There are three types of two-year degree programs and one type of four-year degree program offered at Sinclair:

University parallel programs are associate of arts or associate of science degree programs designed specifically for transfer to a fouryear institution.

Career programs are associate of applied science degree programs designed to prepare for a particular job or vocational area or transfer to a four-year school.

Individualized degrees are associate of individualized study or associate of technical study degree programs designed for specialized interest, often combining multiple degree programs.

## Associate of Arts (AA) and Associate of Science (AS)

Associate of Arts and Associate of Science degrees are designed for students wishing to complete the first two years of a bachelor's degree, as well as those desiring two years of a liberal arts education.

## Associate of Applied Science (AAS)

Associate of Applied Science degrees are awarded in recognition of successful completion of career technical education programs and prepare students for immediate employment upon graduation. The curricula for applied associate degree programs are described in terms of technical and non-technical studies. Non-technical studies include general education and courses that serve as a base for the technical field. Some degrees require program prerequisites as noted. Program prerequisites are courses or requirements that must be successfully completed prior to entering the program.

## Associate of Technical Study (ATS)

Associate of Technical Study degrees are awarded for successful completion of a planned program of study designed to respond to the need for specialized technical education. The program must have an area of concentration which is equivalent to at least 30 semester credit hours in technical studies and a clearly identifiable career objective. The area of concentration can either be formed by: a) a coherent combination of technical courses selectively drawn from two or more technical programs currently offered by the college to serve a career objective that would not be adequately addressed by one of the existing programs alone; or b) courses completed or training received by a student at other institutions of higher education, career centers, or other educational enterprises judged by the institution to be of college level and for which the institution awards degree credit.

## Associate of Individualized Study (AIS)

Associate of Individualized Study degrees are awarded for the satisfactory completion of an individually planned program designed to serve an educational objective that could not be served through another degree program of the institution. The program, planned by the student and advisor must contain an area of concentration consisting of a minimum of 20 semester credit hours which is formed according to one of the following models: a) an interdisciplinary, but coherent combination of courses drawn from a minimum of two and a maximum of four instructional areas; b) up to forty semester credit hours awarded by the institution for documentable educational experiences or courses completed at other institutions of higher education or educational enterprises judged by the institution to be of college level; or c) an unusual but academically coherent combination of technical and general studies courses.

## Bachelor of Applied Science (BAS)

Bachelor of Applied Science degrees offer educational opportunities to students who have completed an AAS degree and are now seeking to complete a four-year degree.

Some degree programs contain embedded certificates. These are certificate programs that contain all of the same courses required for a degree program. When a student completes these requirements while they are pursuing their selected degree program, the certificate(s) will be automatically awarded. If a student does not want to automatically receive embedded certificates, they must come to the Registration \& Student Records office on the Dayton Campus, or the front desk at any Regional Center to fill out the required form to prevent the embedded
certificate(s) from being awarded. The form must be completed and submitted during the first term the degree program is declared.

## Certificate (CRT) and Short Term Certificate (STC)

Certificate programs are academic programs of study designed to prepare students for a particular career area, but not at the level required for an associate degree. There are one year certificate programs and short term technical certificates. The technical certificates are much more industry-focused and designed for workforce preparation.

## Associate of Arts

## Art, AA

## Program Code: ART.S.AA • Credit Hours: 65

## Description

The Art university parallel program is oriented toward students who intend to transfer to a four-year college or university. The Art curriculum challenges students' creative thinking abilities with its studio and art history courses. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

For students who want a career in art, the faculty of working professional artists will advise and assist in developing techniques and a body of work that will transfer well to other colleges and universities. If the goal is to set up a working studio after graduation, students will be given the necessary information by the faculty. Although the most obvious career for college graduates with art degrees is that of fine artists, there are other opportunities which require the skill, knowledge and talents gained through the study of art. These include art teachers, art historians, art curators and art therapists.

## Program Requirements

- ART Art History Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.
- ART ART Concentration Elective $\mathbf{6} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- ART ART Elective $9 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- ART ART 2D or 3D Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- ART 1101-2-D Foundations
- ART 1102-3-D Foundations
- ART 1111 - Drawing I
- ART 2230 - Art History: Ancient through Medieval Periods
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 2270 - Fine Art Internship
- ART 2295 - Graduation Portfolio Development \& Exhibition
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Social \& Behavioral Sciences Elective (from two or more discplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Arts \& Humanities Elective (May not be an ART course) $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.

Drawing Concentration (2D)

- ART 1112 - Drawing II
- ART 2111 - Intermediate Drawing I

Life and Anatomy Concentration (2D)

- ART 2216 - Life Drawing \& Anatomy I
- ART 2217 - Life Drawing \& Anatomy II

Painting Concentration (2D)

- ART 1121 - Beginning Painting I
- ART 1122 - Beginning Painting II

Photography Concentration (2D)

- ART 1161 - Black \& White Darkroom Photography I AND
- ART 1162 - Black \& White Darkroom Photography II OR
- ART 2265 - Digital Color Photography I OR
- ART 1170 - Alternative Photographic Processes OR
- ART 1171 - Studio Photography

Printmaking Concentration (2D)

- ART 2269 - Printmaking I
- ART 2279 - Printmaking II

Ceramics Concentration (3D)

- ART 1141 - Introduction to Ceramics
- ART 1142 - Intermediate Ceramics

Sculpture Concentration (3D)

- ART 1131 - Introduction to Sculpture
- ART 1132 - Intermediate Sculpture

2D Electives

- ART 1112 - Drawing II
- ART 1121 - Beginning Painting I
- ART 1122 - Beginning Painting II
- ART 1161 - Black \& White Darkroom Photography I
- ART 1162 - Black \& White Darkroom Photography II
- ART 1170 - Alternative Photographic Processes
- ART 1171 - Studio Photography
- ART 1175 - Computer Photography
- ART 2111 - Intermediate Drawing I
- ART 2112 - Intermediate Drawing II
- ART 2216 - Life Drawing \& Anatomy I
- ART 2217 - Life Drawing \& Anatomy II
- ART 2221 - Intermediate Painting-Observation \& Concept
- ART 2222 - Intermediate Painting - The Figure
- ART 2265 - Digital Color Photography I
- ART 2269 - Printmaking I
- ART 2279 - Printmaking II
- ART 2280 - Intermediate Printmaking I
- ART 2281 - Intermediate Printmaking II
- ART 2285 - Printmaking - Monotype

3D Electives

- ART 1131 - Introduction to Sculpture
- ART 1132 - Intermediate Sculpture
- ART 1133 - Figurative Sculpture
- ART 1141 - Introduction to Ceramics
- ART 1142 - Intermediate Ceramics
- ART 2141 - Advanced Ceramics


## Art History Electives

- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- ART 2239 - History of Asian Art


## Associate of Arts, AA

## Program Code: LA.S.AA • Credit Hours: 60

## Description

The Associate of Arts-Liberal Arts is designed for students who are planning to transfer to a four-year college or university in a variety of majors, including education. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Transferring students can select specific electives based on the requirements of their intended major at the receiving institution. Students should communicate with the receiving institution early into their educational program and are required to work with an academic advisor to select appropriate courses. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Students will graduate with a general understanding of the complex nature of human society. Introductory knowledge of communication, critical thinking and inter-cultural awareness will transfer to baccalaureate programs or as soft skills in a variety of industries.

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $9 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $9 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Any Course in Catalog Elective - 20 Cr . $\mathbf{H r}(\mathbf{s})$.


## Communication Studies, AA

## Program Code: COM.S.AA • Credit Hours: 62

## Description

Communication is the study of interactions between people in interpersonal, small group, public speaking, organizational and massmedia settings. This degree can lead to successful transfer to a fouryear college or university baccalaureate program. Through careful course selection, a program of study can be planned to satisfy a student's particular educational and career interests.
Enhancing communication skills provides invaluable benefits for all students, regardless of major. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

A communication degree can provide opportunities in journalism, speech education, business, industry, government, broadcast media, law, ministry, social services, public relations, or provide valuable communication skills to enrich any career. Through careful course selection, a program of study can be planned to satisfy your particular educational and career interests. Enhancing communication skills provides invaluable benefits for all students, regardless of major or career path.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2220 - Introduction to Communication Theory
- COM 2225 - Small Group Communication
- COM 2278-Communication Capstone
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Any Group $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Any Course in Catalog Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- Communication/Journalism Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Communication/Journalism Electives

- COM 2230 - Nonverbal Communication
- COM 2235 - Principles of Interviewing
- COM 2245 - Intercultural Communication
- COM 2285- Organizational Communication
- COM 2286 - Public Relations Principles
- COM 2287 - Effective Listening
- JOU 2101 - Introduction to Journalism
- JOU 2203 - Reporting \& Writing for Media


## Creative Writing, AA

## Program Code: CRWE.S.AA • Credit Hours: 61

## Description

The Creative Writing Program is designed specifically for students interested in studying how to write original creative work, including poetry, fiction, and nonfiction. Students hone their writing skills and learn about the world of publishing in this program, as well. Graduates of this program are well-prepared to transfer to a four-year college or university to continue their studies. The curriculum fulfills the freshman and sophomore general education requirements of most fouryear colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- ENG 2250 - Introduction to Creative Writing
- ENG 2262 - Writing to Publish

Choose three courses from:

- ENG 2255 - Poetry Writing AND/OR
- ENG 2256 - Fiction Writing AND/OR
- ENG 2257 - Creative Writing: Nonfiction AND/OR
- ENG 2259 - Novel Writing
- LIT 2220 - Introduction to Literature
- LIT 2217 - Images of Women in Literature OR
- LIT 2234 - Literature of Africa, Asia, \& Latin America OR
- LIT 2236 - African-American Literature
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $9 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- Language Elective $\mathbf{4 C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Elective 4 Cr. Hr.

- CHN 1101 - Elementary Chinese I
- FRE 1101 - Elementary French I
- GER 1101 - Elementary German I
- JPN 1101 - Elementary Japanese I
- SPA 1101 - Elementary Spanish I


## Elementary Education, AA

## Program Code: ELEE.S.AA • Credit Hours: 62

## Description

This Associate of Arts degree program in Elementary Education is designed to serve as a transfer degree for those students interested in teacher education in Pre-K through 12th grade. All courses in this degree are Ohio Transfer 36 (OT36) courses or Transfer Assurance Guide (TAG) courses and are designed to transfer seamlessly to any state (and some private) Ohio colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

This degree will serve as a degree for students to transfer to 4-year programs for teacher education in grades PreK-12th.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ECE 1101 - Introductory Child Development
- ECE 2200 - Families, Communities \& Schools
- EDU 1100 - Introduction to Education
- EDU 1105 - Individuals with Exceptionalities
- EDU 1109 - Effective Classroom Management \& Learning Environments
- EDU 1111 - Classroom Observation K-12 Field Experience
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HIS 1102 - United States History II OR
- HIS 1112 - Western Civilization II
- MAT 2415 - Mathematics for Elementary Education I
- MAT 2435 - Mathematics for Elementary Education II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 7 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (may not be PSY) $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- PSY 1100 - General Psychology
- PSY 2242 - Educational Psychology
- Any Course in Catalog Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

English, AA

Program Code: ENGE.S.AA • Credit Hours: 62

## Description

The Associate of Arts in English comprises an array of literature courses that introduces students to the world of literature. Students planning to transfer to a four-year program in English or a related field will have a strong foundation based on the broad English curriculum, which also fulfills the first and second year general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II

Choose two literature electives:

- LIT 2201 - British Literature I AND/OR
- LIT 2202 - British Literature II AND/OR
- LIT 2211 - American Literature I AND/OR
- LIT 2212 - American Literature II
- LIT 2217 - Images of Women in Literature
- LIT 2220 - Introduction to Literature
- LIT 2230 - Great Books of the Western World
- LIT 2234 - Literature of Africa, Asia, \& Latin America
- LIT 2236 - African-American Literature
- OT36 Arts \& Humanities Elective (May not be LIT course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $6 \mathbf{C r}$. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $9 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Associate of Arts Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- Language Elective $4 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Elective

Choose one course from:

- CHN 1101 - Elementary Chinese I
- FRE 1101 - Elementary French I
- GER 1101 - Elementary German I
- JPN 1101 - Elementary Japanese I
- SPA 1101 - Elementary Spanish I


## Geography, AA

## Program Code: GEOE.S.AA • Credit Hours: 63-64

## Description

Geography is the study of Earth's landscapes, peoples, places and environments. It provides a knowledge of the Earth's physical and human systems and of the interdependency of living things and physical environments. The Associates of Arts Degree in Geography is designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs in geography or related fields. The curriculum fulfills the freshman and sophomore general education requirements for most four-year colleges and universities. In addition, the program offers a one-year certificate in Geographic Information Systems. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Ample opportunities exist for students with a degree in geography. The US Department of Labor projects "much faster than average growth in excess of $20 \%$ or more, in jobs for geographers, and other geographic professionals." A list of possible careers include: Environmental Scientist/Analyst, Natural Resource Management, Urban and Regional Planning, Education, GIS Analyst, Tourism, International Development, Marketing Analyst, Demographer, Park Ranger and Environmental Conservation. Note: Some career opportunities may require more than two years of college study.

## Program Requirements

- BIO 2225 - Ecology
- CIS 2165 - Database Management
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- GEO 1101 - Global Forces, Local Diversity
- GEO 1102 - Earth's Physical Environment
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1201 - World Regional Geography: People, Places \& Globalization
- GEO 1209 - Map Design \& Visualization
- GEO 2210 - Advanced Spatial Analysis
- GLG 1101 - Physical Geology AND
- GLG 1111 - Physical Geology Laboratory OR
- GEO 1300 - Introduction to Weather \& Climate
- HUM 1135 - Environmental Ethics
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be HUM course) $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. Hr(s).
- SCC 1101 - First Year Experience
- Language Electives $8 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## History, AA

## Program Code: HISE.S.AA • Credit Hours: 61

## Description

An Associate of Arts in History introduces students to broad periods of the human experience. History, though, is more than just the study of the past. Students will also develop cultural literacy, critical thinking, and other skills that inform global citizenry. These skills can prepare students planning to transfer to a four-year college or university and pursue a baccalaureate degree in history or a related field, providing a foundation for careers in teaching, journalism, archival work, government, politics, and law. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HIS 1101 - United States History I
- HIS 1102 - United States History II
- HIS 1111 - Western Civilization I
- HIS 1112 - Western Civilization II
- HIS 1105 - African-American History OR
- HIS 2218 - History of Ohio

Choose two courses from:

- HIS 2215 - Survey of African History AND/OR
- HIS 2216 - Survey of Latin American History AND/OR
- HIS 2217 - Survey of East Asian History AND/OR
- HIS 2219 - Survey of the Middle East
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be HIS course) $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Associate of Arts Elective $\mathbf{6}$ Cr. $\mathbf{H r}(\mathbf{s})$.


## Math Education, AA

## Program Code: MED.S.AA • Credit Hours: 62

## Description

This program is for students who wish to pursue teaching mathematics in grades 7-12. The course content includes mathematics and education courses that students need during the first two years of a bachelor's degree program in Math Education. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

With a completed bachelor's in Math Education students will be able to be a Math Teacher in grades 7-12.

## Program Requirements

- COM 2211 - Effective Public Speaking
- EDU 1100 - Introduction to Education
- EDU 1103 - Educational Technology OR
- SOC 2210 - Cultural Humility for Working with Youth
- EDU 1105 - Individuals with Exceptionalities
- EDU 1109 - Effective Classroom Management \& Learning Environments
- EDU 1111 - Classroom Observation K-12 Field Experience
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II OR
- MAT 2320 - Linear Algebra
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- PSY 1100 - General Psychology
- PSY 2242 - Educational Psychology
- OT36 Social \& Behavioral Sciences Elective (may not be PSY course) $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Modern Languages, AA

## Program Code: FORE.S.AA • Credit Hours: 60-62

## Description

The Associate of Arts in Modern Languages is designed for students who are planning to transfer to a four-year university as a Chinese, French, German, Japanese, or Spanish major, or into a major for which
modern language is a strong base. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Any Group 9 Cr. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- First-year Language Electives $\mathbf{8 C r} \mathbf{~ H r}(\mathbf{s})$.

Student may choose either the second year of the same foreign language or the first year of a different foreign language:

- Second-year Foreign Language Electives $\mathbf{8 ~ C r} . \mathbf{H r}(\mathbf{s})$. OR
- First-year Language Electives 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.


## Multimedia Journalism, AA

Program Code: COMMJ.S.AA • Credit Hours: 61

## Description

Communication is the study of interactions between people in interpersonal, small group, public speaking, organizational and massmedia settings. The Multimedia Journalism degree is a collaboration of the Communication, Journalism and Visual Communication programs. Multimedia journalism is presently the fastest growing area of journalism. It will also prove valuable for students who plan to transfer to a four-year college or university baccalaureate program to continue their studies in journalism or mass communication. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Multimedia journalism is the fastest growing area of journalism, and this degree prepares students to work as producers for news and corporation websites. Students may also elect to transfer to a fouryear college or university baccalaureate program to continue their studies in journalism or communication.

- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2225 - Small Group Communication
- COM 2278 - Communication Capstone
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- JOU 2101 - Introduction to Journalism
- JOU 2203 - Reporting \& Writing for Media
- JOU 2270 - Journalism Internship
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two discplines) $6 \mathbf{C r} \mathbf{H r} \mathbf{~ ( s ) . ~}$
- OT36 Any Group 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience


## Music, AA

## Program Code: MUS.S.AA • Credit Hours: 65

## Description

The Associate of Arts in Music is designed for students who will be transferring to a four-year institution for further studies upon graduation in music education, music performance, or any baccalaureate program in music. The A.A. curriculum fulfills the requirements of the first two years of a bachelor of music, with special emphasis on public performance. An audition is required upon entering the program and a solo recital is required before graduation. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MUS 1110 - Music Technology for Music Majors
- MUS 1111 - Music Theory I
- MUS 1112 - Aural Skills I
- MUS 1113 - Music Theory II
- MUS 1114 - Aural Skills II
- MUS 2111 - Music Theory III
- MUS 2112 - Aural Skills III
- MUS 2113 - Music Theory IV
- MUS 2114 - Aural Skills IV
- MUS 2117 - Survey of Musical Styles I
- MUS 2118 - Survey of Musical Styles II
- MUS Applied Instrument Elective $\mathbf{8 C r} \mathbf{~ H r}(\mathbf{s})$.

Student must take the appropriate major ensemble from the following:

- MUS 2231 - Chorale for Majors OR
- MUS 2241 - Music Practicum for Majors OR
- MUS 2243 - Concert Band for Majors OR
- MUS 2245 - Classical Guitar Ensemble for Majors Secondary Instrument (piano students must take voice while all other student must take piano):
- MUS 1115 - Piano for Music Majors I AND
- MUS 1116 - Piano for Music Majors II AND
- MUS 2115 - Piano for Music Majors III AND
- MUS 2116 - Piano for Music Majors IV OR
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice
- OT36 Arts and Humanities Elective (at least two disciplines and may not include MUS 1121) $\mathbf{6} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Political Science, AA

## Program Code: PLSE.S.AA • Credit Hours: 61

## Description

An Associate of Arts in Political Science degree exposes students to the political thought, processes, and behavior of governments, institutions, and organizations. The study of political science provides one with the concepts, theories and methods necessary to analyze problems scientifically. These tools serve as an underpinning for a level of civic engagement constructed around critical thinking and cultural literacy, and can be applied in a wide range of careers including government, law, business, international organizations, nonprofits, journalism, and teaching. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- PLS 1120-American Federal Government
- PLS 1232 - State \& Local Government
- PLS 2200 - Political Life, Systems \& Issues
- PLS 2220 - International Relations
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Associate of Arts Elective $\mathbf{1 2} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.


## Psychology, AA

## Program Code: PSYE.S.AA • Credit Hours: 60

## Description

The Associate of Arts in Psychology prepares students for entry-level positions in fields such as education, mental health, and community service. The curriculum includes courses in social psychology, abnormal psychology, human development, and personality psychology, as well as current psychological theory and practice. This degree prepares students to directly enter the workforce and it transfers well to most 4-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Graduates are employed as psychiatric and mental health technicians, case workers or managers, victim advocates, residential/ group home specialists, and in a variety of other positions in which knowledge of human behavior and mental processes is beneficial, including sales and marketing, human resources, community service agencies, administrative positions, and others.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (May not be PSY course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PSY 2220 - Personality Psychology
- PSY 2225 - Social Psychology
- Psychology Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1160 - Black Psychology OR
- PSY 2180 - Psychology of Gender
- SCC 1101 - First Year Experience
- Associate of Arts Elective $\mathbf{8 C r} \mathbf{~ H r}(\mathbf{s})$.

Psychology Electives

- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2214 - Drugs \& Behavior
- PSY 2218 - Principles of Counseling
- PSY 2228 - Industrial Organizational Psychology
- PSY 2235 - Behavioral Science Research Methods
- PSY 2236 - Behavioral Science Statistics
- PSY 2242 - Educational Psychology
- PSY 2250 - Behavior Modification
- PSY 2270 - Psychology Service Learning


## Social Work, AA

Program Code: SWKE.S.AA • Credit Hours: 60-62

## Description

Social Work is a profession for people who want to help those in need to overcome difficulties and improve their lives. The Associate of Arts in Social Work is dedicated to students wishing to transfer to a four year university in Social Work or a related field. With an associate's, students can begin working in the field as paraprofessionals in social service settings. Social Work will provide students with skills and knowledge necessary to help people with a wide range of issues including psychological/mental health, behavioral, financial, health, relationships, and substance abuse problems. At the Associate's level, students complete practicum and service learning opportunities and explore skills related to advocacy and case management as well as skills related to working with multicultural client populations. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Social Work is a helping profession which aims to assist individuals, families, and larger groups; as well as targeting the social problems which effect society today. The Department of Labor Statistics shows the job outlook for Social Work is projecting growth in the field of $19 \%$ between 2012 and 2022 which is faster than the average growth for other occupations. There is an increased demand for social work in fields such as aging and healthcare. Social Work allows opportunities for licensure and higher education which lead to more open doors for employment in the field. Social Workers are found in almost every facet of society including in the medical field such as hospitals and nursing homes, child welfare, schools, jails, and private practice.

## Program Requirements

- BIO 1111 - General Biology I
- BIO 1211 - General Biology II OR
- OT36 Natural and Physical Science Elective
- COM 2206 - Interpersonal Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts and Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary OR
- OT36 Social and Behavioral Sciences Elective
- PLS 1120 - American Federal Government OR
- PLS 2200 - Political Life, Systems \& Issues
- PSY 1100 - General Psychology
- SCC 1101 - First Year Experience
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work
- Modern Language Electives 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.


## Sociology, AA

## Program Code: SOCE.S.AA • Credit Hours: 60

## Description

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. The Associates of Arts in Sociology can lead to successful transfer to a four-year college or university baccalaureate program. Sociology provides 21st century skills for all students regardless of the major: The ability to critically analyze social problems/issues necessary for responsible decision making; a systematic approach to information gathering and interpretations of data; a fundamental comprehension of multi-cultural differences and global diversity. With an associate's, students can begin working in the field as paraprofessionals in social service \& business settings. The curriculum fulfills the freshman and sophomore general education requirements for most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $8 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- SCC 1101 - First Year Experience
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 1160 - Sociology of Aging
- SOC 2205 - Social Problems
- SOC 2215 - Race \& Ethnicity
- Associate of Arts Elective $\mathbf{6} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Sport and Recreation Education, AA

## Program Code: PED.S.AA • Credit Hours: 65

## Description

This program is designed for sport and recreation careers and will fulfill the freshman and sophomore educational requirements at most four-year colleges or universities. Sport and Recreation provides two years of a solid foundation in sport related business. It also contains a Coaching short-term certificate. Course work includes management, marketing, coaching, and leadership along with many other respective components of the industry. Students are prepared to enter the profession or transfer for completion of a baccalaureate degree. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Sport and Recreation Education gives the student a variety of options. The student could work in sports information, promotions, ticket sales, media relations, event management, tournament planning and marketing and facility management. Some careers will require a baccalaureate degree.

## Program Requirements

- ALH 1132 - Heartsaver First Aid, CPR \& AED
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 2419 - Health Promotion, Fitness \& Sport Programming
- ENT 2140 - Small Business Finance
- GLG 1101 - Physical Geology
- GLG 1201 - Historical Geology
- HIS 1111 - Western Civilization I
- HIS 1112 - Western Civilization II
- MAN 1107 - Foundations of Business
- MAN 1114 - Introduction to Sports Management
- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership
- MAN 2270 - Management Internship
- OT36 Arts \& Humanities Elective (at least two disciplines) $\mathbf{6 C r} \mathbf{~ H r ( s ) . ~}$
- OT36 Mathematics Elective $\mathbf{3 ~ C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (may not be PSY course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MRK 2220 - Small Business Marketing
- PSY 1100 - General Psychology


## Theatre Performance, AA

## Program Code: THEP.S.AA • Credit Hours: 61

## Description

The theatre performance degree is designed as a university-parallel program for students to transfer to four-year institutions. The faculty and staff are theatre professionals with extensive experience in acting, directing, playwriting and choreography. Curriculum is based on skills required to enhance students' performance including: voice, movement, character and script analysis, dance, auditioning and presentation. Successful students achieve real-world experience participating in our theatre productions in several performance venues. Students must pass all THE courses with a grade of C or better. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Accreditation

Sinclair's Theatre Performance Program is accredited by the National Association of Schools of Theatre (NAST).

## Career Opportunities

Employment opportunities are available in areas such as performer, director, educator, dramaturge, playwright, arts administrator, company business or artistic manager. These positions can commonly be found in theatre, film, television commercials, voice over work, theme parks, cruise ships, education, and modeling. A theatre performance degree also provides skills to enrich any career that requires artistic research, presentations, customer service, confidence or communication.

## Program Prerequisite(s):

## Approval of Department

## Program Requirements

- COM 2211 - Effective Public Speaking
- DAN 1172 - Ballet OR
- DAN 1173 - Modern Dance OR
- DAN 1174 - Jazz Dance I OR
- DAN 1175 - Tap Dance
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be THE course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- THE 1105 - Introduction to Theatre
- THE 1106 - Stagecraft
- THE 1107 - Lab for Stagecraft
- THE 1111 - Acting I
- THE 1212 - Voice For The Actor
- THE 1194 - Applied Theatre Technology I
- THE 1194 - Applied Theatre Technology I
- THE 1196 - Applied Theatre Technology II
- THE 1199 - Applied Theatre Performance
- THE 2115 - Movement For The Actor
- THE 2201 - History of Theatre I
- THE 2202 - History of Theatre II
- THE 2206 - Script Analysis
- THE 2216 - Acting II


## Theatre Technology, AA

## Program Code: THET.S.AA • Credit Hours: 62

## Description

The theatre technology degree is a university-parallel program designed for transfer to four-year institutions. Faculty and staff are theatre professionals with extensive experience in design and technology: scenic, lighting, costumes, props, sound, directing and stage management. Curriculum is based on skills to enhance students' technical skills in stage craft, lighting and costume fundamentals, and stage management. Successful students achieve real-world experience with theatre productions in several performance venues. Students must pass all THE courses with a grade of C or better. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Employment opportunities are available in areas such as designer, technician, director, educator, stage manager, arts administrator and company business or artistic manager. These positions can commonly be found in theatre, film, theme parks, cruise ships, rock shows, museums, churches, or fashion. A theatre technology degree also provides the skills to enrich any career that requires artistic research, safety troubleshooting, management, and creative problem solving.

## Accreditation

Sinclair's Theatre Technology Program is accredited by the National Association of Schools of Theatre (NAST).

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be THE course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- THE 1105 - Introduction to Theatre
- THE 1106-Stagecraft
- THE 1107 - Lab for Stagecraft
- THE 1103 - Principles of Acting OR
- THE 1111 - Acting I
- THE 1116 - Stage Lighting Fundamentals
- THE 1117 - Lab for Stage Lighting Fundamentals
- THE 1118 - Costume Fundamentals
- THE 1119 - Lab for Costume Fundamentals
- THE 1194-Applied Theatre Technology I
- THE 1194 - Applied Theatre Technology I
- THE 1196 - Applied Theatre Technology II
- THE 1196 - Applied Theatre Technology II
- THE 2201 - History of Theatre I
- THE 2202 - History of Theatre II
- THE 2206 - Script Analysis
- THE 2220 - Theatre Portfolio
- THE 2240 - Stage Management
- THE 2296 - Applied Theatre Technology IV


## Associate of Science

## Associate of Science, AS

## Program Code: LA.S.AS • Credit Hours: 60-62

## Description

The Associate of Science is designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs such as Biology, Chemistry, Geology, Mathematics, Physics and Pre-professional programs, i.e. Medicine, Pharmacy, etc. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1450 - Introductory Statistics OR
- MAT 1455 - Introduction to Data Science OR
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence OR
- MAT 2240 - Calculus for the Life Sciences OR
- MAT 2570 - Discrete Mathematics OR
- MAT 2270 - Calculus \& Analytic Geometry I
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $\mathbf{1 2} \mathbf{C r}$. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- Any Course in Catalog Elective - $\mathbf{2 0} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Biology, AS

## Program Code: BIOE.S.AS • Credit Hours: 60

## Description

The Associate of Science in Biology is designed for students who are planning to transfer to a four-year college or university and pursue a baccalaureate degree in biology. The curriculum fulfills the freshman and sophomore requirements of most colleges and universities. The biology courses offer a solid foundation in key areas of biology such as cell biology, genetics, evolution, and ecology with a broad survey of life on Earth. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 to graduate.

## Career Opportunities

Studying biology opens the door to a wide variety of teaching, research, and service careers including health sciences, forensic science, environment, agriculture, and science writing. Students of the biological sciences find jobs in colleges and universities, primary and secondary schools, museums, zoos, nature centers, hospitals, clinics, and laboratories. Governments need the expertise of biologists to formulate sound policies and legislation. Many non-profit organizations, businesses, and industries also depend on biologists to fulfill their missions.

## Program Requirements

- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- BIO 2222 - Evolution
- BIO 2225 - Ecology
- BIO 2235 - Genetics
- BIO 2236 - Lab for Genetics
- CHE 1211 - General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Business Administration, AS

Program Code: BUS.S.AS • Credit Hours: 63

## Description

The University Parallel program is designed for the student who wants to pursue a baccalaureate degree at a four-year institution in a business discipline. The purpose of the degree program is to provide the basic core of business and general education requirements for the first two years of a four-year program. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENG 1201 - English Composition II OR
- MAT 2180 - Business Statistics II
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MRK 2101 - Principles of Marketing Management
- MAT 2160 - Calculus for Business \& Economics
- MAT 2170 - Business Statistics I
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (May not be ECO course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Chemistry, AS

## Program Code: CHEE.S.AS • Credit Hours: 61

## Description

The Associate of Science degree in Chemistry fulfills the freshman and sophomore general education and degree-specific requirements for students transferring to programs which require General and Organic Chemistry at most four-year colleges and universities. Recipients of this degree may be able to apply for laboratory technician or research assistant positions. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Studying chemistry opens the door to a wide variety of teaching, research, industrial, clinical and service careers including health sciences, forensics, environment, manufacturing and science writing. Chemistry graduates find jobs in colleges and universities, primary and secondary schools, clinics and laboratories. Governments rely on the expertise of chemists to formulate sound policies and legislation and many non-profit organizations, businesses, and industries hire chemists who use their skills to meet the goals of the organization.

## Program Requirements

- CHE 1211-General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I
- CHE 2151 - Lab for Organic Chemistry I
- CHE 2121 - Organic Chemistry II
- CHE 2161 - Lab for Organic Chemistry II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Computer Science, AS

Program Code: CS.S.AS • Credit Hours: 61

## Description

Course work will focus on giving students a foundational knowledge of computer science concepts such as mathematics and programming skills. Furthermore, this Associate of Science degree will provide students a much needed transfer pathway to Computer Science Bachelor Degrees at four-year universities. As part of this degree program, students must complete the requirements of theOhio Transfer 36 in order to graduate.

## Accreditation

This program is fully accredited by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

According to Ohio Bureau of Labor Information data, statewide increases of $18.1 \%$ for Software Developers; Applications, and 7.8\% for Software Developers; Systems Software, are projected between 2014 and 2024.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2207 - Data Structures \& Algorithms OR
- CIS 2266 - Python for Data Analytics
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective $\mathbf{1 8} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 9 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Engineering and Engineering Technology University Transfer, AS

Program Code: ESUP.S.AS • Credit Hours: 60-62

## Description

The Engineering and Engineering Technology University Transfer Associate degree programs are for students who plan to attend a fouryear college or university for a degree in Engineering Science or Engineering Technology. This program is designed to bring an entering student up to the level of a third year university student in Engineering or Engineering Technology. Course sequence is designed to transfer the basic requirements of most universities. The student is strongly advised to consult the particular school he or she will be entering as well as a Sinclair academic advisor, before signing up for any courses. Please see an academic advisor for the listing of available electives and assistance in selecting electives toward your major that will be accepted by the receiving transfer institution.

As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Students complete this program to transfer to a four-year institution to study various engineering disciplines to complete a BS degree in Engineering

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- OT36 Arts and Humanities (at least two discplines) $\mathbf{6 C r}$. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- PHY 2201 - General Physics I AND
- PHY 2207 - Lab for General Physics I OR
- PHY 1141 - College Physics I
- PHY 2202 - General Physics II AND
- PHY 2208 - Lab for General Physics II OR
- PHY 1142 - College Physics II OR
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- Engineering Technology Elective OR
- Engineering Science Elective $\mathbf{2 4} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.

Engineering Technology Electives

- CIS 1202 - C++ Software Development
- CAM 1109 - Fundamentals of Tooling \& Machining
- EET 1116 - Electronics Schematics \& Fabrication
- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1131 - Business Writing
- ENG 1201 - English Composition II
- ISE 1100 - Product Development Fundamentals
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2240 - Six Sigma: Green Belt
- MAT 1450 - Introductory Statistics
- MAT 2240 - Calculus for the Life Sciences
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 1301 - SolidWorks Basics
- MET 2101 - Thermodynamics
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics

Engineering Science Electives

- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- CAT 1301-Civil Construction CAD
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II AND
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I AND
- CHE 2151 - Lab for Organic Chemistry I
- CHE 2121 - Organic Chemistry II AND
- CHE 2161 - Lab for Organic Chemistry II
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2207 - Data Structures \& Algorithms
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2550 - Linux Operating System
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2131 - Engineering Digital Design
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1201 - English Composition II
- GLG 1101 - Physical Geology AND
- GLG 1111 - Physical Geology Laboratory
- GLG 1201 - Historical Geology AND
- GLG 1211 - Historical Geology Laboratory
- MAT 2170 - Business Statistics I
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- MAT 2320 - Linear Algebra
- MAT 2330 - Differential Equations \& Linear Algebra
- MAT 2570 - Discrete Mathematics
- MAT 2600 - Applied Statistics
- MEE 2101 - Statics for Engineers
- MEE 2201 - Thermodynamics for Engineers
- MEE 2301 - Strength of Materials for Engineers
- MEE 2401 - Dynamics for Engineers
- MET 1301 - SolidWorks Basics
- PHY 2210 - MATLAB for Scientists \& Engineers


## Geology, AS

## Program Code: GLGE.S.AS • Credit Hours: 60

## Description

The Associate of Science degree in Geology is designed for students planning to transfer to a four-year college or university and pursue a Baccalaureate Degree Program in the Earth Sciences. The curriculum approximates the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Careers in the Earth Sciences are highly diverse and in global demand. They can be found at local, state and federal levels, in private industry, and in education. Natural resource sustainability, global climate change, natural hazard management, water supply issues, and contamination remediation are continuing to be pressing, global issues that require involvement from Earth Scientists. Earth scientists also play an important role in the development of environmental policies and regulations.

## Program Requirements

- CHE 1211-General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1251 - Lab for General Chemistry I
- CHE 1261 - Lab for General Chemistry II
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- GLG 1101 - Physical Geology
- GLG 1111 - Physical Geology Laboratory
- GLG 1201 - Historical Geology
- GLG 1211 - Historical Geology Laboratory
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathrm{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathrm{s})$.
- PHY 2201-General Physics I
- PHY 2202 - General Physics II
- PHY 2207 - Lab for General Physics I
- PHY 2208 - Lab for General Physics II
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Health Sciences Pre-Professional Studies, AS

Program Code: PPS.S.AS • Credit Hours: 62-64

## Description

The Sinclair Health Sciences Pre-Professional Studies degree provides a flexible pathway for students interested in the following professions who wish to pursue transfer to a university program through an academic pathway* to the following Health Science Professions: Doctor of Dental Sciences, Medical Doctor, Doctor of Osteopathy, Physician's Assistant, Doctor of Pharmacy, Doctor of Physical Therapy, Doctor of Veterinary Medicine. This degree does include some patient-interaction through work-based learning or clinical practicums. *Students will be advised that different professional schools have different pre-requisites and they must consult their intended school of study to determine their best curricular pathway to complete their prerequisites. Further courses may be needed in order to meet the pre-requisites required by different programs. Communication with an Academic Adviser is strongly recommended. This list is not inclusive. Further professional program prerequisites may be identified as students indicate interest.

## Career Opportunities

This highly transferable degree has been designed for the student interested in a medical degree in one of the following fields: Doctor of Osteopathy (DO), Medical Doctor (MD), Doctor of Dental Surgery (DDS), Doctor of Veterinary Medicine (DVM), Doctor of Pharmacy (DP), Doctor of Physical Therapy (DPT), or Physician's Assistant (PA). Completion of this degree will position the student with over 60 credits toward entry to a University program as well as clinical experience in the field of interest (a requirement of many professional schools.) Working closely with an Academic Adviser, the student will be able to design their program to best fit the requirements of their intended profession and intended school of transfer.

- ALH 1102 - Basic Healthcare Practices \& Medical Scribe
- ALH 1120 - Nurse Aide Training OR
- ALH 1250 - Health Science Practicum
- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- CHE 1211 - General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I
- CHE 2151 - Lab for Organic Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HUM 1135 - Environmental Ethics OR
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (student must have two Arts/Humanities from different discplines) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MAT 2240 - Calculus for the Life Sciences OR
- MAT 2270 - Calculus \& Analytic Geometry I
- OT36 Natural \& Physical Sciences Elective 9 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (must be a nonPSY course) $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100-General Psychology


## Mathematics, AS

## Program Code: MATE.S.AS • Credit Hours: 60-62

## Description

The curriculum of the Associate of Science in Mathematics degree is designed to correspond to both the math and general education courses that a student would take in the first two years of pursuing a Bachelor's degree in math at a four-year institution. Coursework can be customized to fit interests in Statistics/Actuarial Science, Secondary Math Education, or Pure/Applied Mathematics. Students will get a solid grounding in the mathematics that is applied in the physical science and engineering disciplines, and an introduction to more theoretical mathematics. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Actuary, Statistical Consultant, Investment Analyst, Cryptographer, Operations Researcher, High School or College-Level Teacher. Visit www.maa.org/careers/career-profiles for more examples. For more information on these and other careers, including employment outlook and working conditions, go to www.ohcis.intocareers.org and login with username "sinclaircoll" and password "ohiocis03".

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations OR
- MAT 2600 - Applied Statistics AND
- Any Course in Catalog OR
- CIS 1111 - Introduction to Problem Solving \& Computer Programming AND
- CIS 2212 - Java Software Development I AND
- Any Course in Catalog
- MAT 2320 - Linear Algebra OR
- CIS 2217 - Java Software Development II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $10 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $\mathbf{6 C r} \mathbf{~ H r ( s ) . ~}$
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Physics, AS

## Program Code: PHYE.S.AS • Credit Hours: 62-64

## Description

The Associate of Science in Physics is designed for students who are planning to transfer to a four-year college or university and pursue a baccalaureate degree program in Physics. The curriculum fulfills the freshman and sophomore general education requirements along with the required first year physics courses offered at most four-year colleges and universities. Physics majors will develop a solid understanding of the fundamental laws of physics in addition to acquiring strong analytical and laboratory skills. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Physics can be the pathway to a variety of careers such as research scientists, astrophysicists, material scientists, radar project managers, gravity researchers, and many types of engineers.

## Program Requirements

- CHE 1211 - General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1251 - Lab for General Chemistry I
- CHE 1261 - Lab for General Chemistry II
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2320 - Linear Algebra OR
- MAT 2330 - Differential Equations \& Linear Algebra OR
- PHY 2210 - MATLAB for Scientists \& Engineers
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- PHY 2201 - General Physics I
- PHY 2202 - General Physics II
- PHY 2203 - Introduction to Modern Physics
- PHY 2207 - Lab for General Physics I
- PHY 2208 - Lab for General Physics II
- PHY 2780 - Scientific Thought \& Method


## Associate of Applied Science

## Accounting, AAS

## Program Code: ACC.S.AAS • Credit Hours: 64

## Description

Accountants prepare, analyze and verify financial reports and monitor information systems that furnish this information to management. Business executives, bankers, government leaders and investors all rely on financial statements and other reports prepared by accountants that summarize and interpret financial transactions that occur in every business. An accountant must have the ability to develop reliable analyses of business operations which can be used in making business decisions. Students who complete the accounting program can qualify to sit for the CPA exam in Ohio after completing a few additional courses and a qualifying exam as determined by the Ohio Board of Accountancy.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for-profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- ACC 1510 - Computerized Accounting Systems
- ACC 2101 - Intermediate Accounting I
- ACC 2102 - Intermediate Accounting II
- ACC 2211- Cost Accounting
- ACC 2212 - Managerial Accounting \& Finance
- ACC 2321 - Federal Taxation
- ACC 2435 - Auditing
- ACC Accounting Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- LAW 1101 - Business Law
- MRK 2101 - Principles of Marketing Management
- MAN 1107 - Foundations of Business
- MAT 1460 - Mathematics for Business Analysis OR
- MAT 1470 - College Algebra
- MAT 2170 - Business Statistics I
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.

Accounting Electives

- ACC 2270 - Accounting Internship
- ACC 2322 - Advanced Taxation
- ACC 2510 - Advanced Accounting
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- LAW 1102 - Consumer Law
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1110 - International Business
- MAN 2110 - Introduction to Project Management
- MRK 2145 - Principles of Retailing


## Addiction Services, AAS

## Program Code: MHTCD.S.AAS • Credit Hours: 65

## Description

In the Mental Health and Addiction Services department, the Addiction Services degree program prepares entry-level professionals for employment working on an inter-disciplinary team with clinical supervision in chemical dependency treatment settings. Graduates of this program work directly with a diverse group of clients. The program can be taken full-time or part- time. If enrolled full-time, it is designed to be completed in five (5) semesters. It consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. Second-year practicum hours can be submitted toward partial employment requirements of the Ohio Chemical Dependency Professionals Board
(OCDP). To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the web page. A cumulative GPA of 2.0 is required, as well as an initial faculty advising appointment during MHT 1101. A grade of C or higher is required in all program courses. The practicum portion of the curriculum provides 420 hours of supervised experience. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Addiction Services graduates can work at hospitals, substance use disorder treatment centers, and numerous other field-related positions in the community. Graduates have completed the 180 hours of specific education required to sit for the LCDC II exam. The OCDP Board has other requirements for licensure.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1111 - General Biology I
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 1201 - Interviewing Skills
- MHT 1202 - Motivational Interviewing
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2105 - Mental Health Treatment Methods
- MHT 2111 - Group Dynamics I
- MHT 2121 - Practicum I
- MHT 2137-Treatment Techniques in Substance Use Disorders
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2211 - Group Dynamics II
- MHT 2222 - Practicum II
- MHT 2235 - Family Dynamics of Addiction
- PSY 1100 - General Psychology
- PSY 2217 - Abnormal Psychology
- SWK 2207-Anti-Oppressive Social Work


## Agricultural Sciences, AAS

Program Code: AGR.S.AAS • Credit Hours: 62

Description

The Agricultural Sciences Program offers competency in specialized skill areas such as Unmanned Aerial System Precision Agriculture, Alternate and Renewable Energy Sources, and Hazardous Waste Operations and Emergency Response. Graduates of an Agricultural Sciences Program will contribute to filling the current and growing need within the state of Ohio for educated Agricultural personnel. External certificates that will be offered to students within the curriculum include; OSHA Basic Safety in the Workplace, OSHA, Agricultural Safety, HAZWOPER, Pork Quality Assurance, Beef Quality Assurance, ServSafe, +/- Bovine Artificial Insemination.

## Career Opportunities

The associate degree program in Agricultural Sciences prepares competent entry-level Agricultural personnel with additional potential expertise in the following added areas: Agribusiness, Large Animal Sciences, Horticulture, Diesel Mechanics, and Precision Agriculture in UAS. The agricultural sciences are an important part of our past as well as our future, and educated personnel are more in-demand as safer, more specialized workers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- AGR 1160 - Introduction to Agriculture Science
- AGR 1300 - Agronomy OR
- AGR 1110 - Introduction to Large Animal Sciences: Handling \& Husbandry
- AGR 1400 - Agriculture Internship
- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1112 - UAS Precision Agriculture
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- BTN 1110 - Biotechnology \& Bioethics
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- EGV 1101 - Alternate \& Renewable Energy Sources
- ENG 1101 - English Composition I
- FST 1555 - Hazardous Waste Operations \& Emergency Response (HAZWOPER)
- LAW 1101 - Business Law AND
- AGR 1200-Agricultural Economics OR
- AGR 1111 - Principles of Large Animal Reproduction OR
- AGR 1112 - Principles of Large Animal Nutrition
- MRK 2100 - Foundations of Marketing
- MRK 2135 - Digital Marketing
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Applied Psychology, AAS

## Program Code: PSY.S.AAS • Credit Hours: 60

## Description

The Applied Psychology program will prepare students for entry level positions in a number of fields including research, behavioral analysis, education, mental health, and community service. The coursework will emphasize development of skills and knowledge to enable students to work in high-demand areas related to applied research and behavioral analysis. The curriculum includes courses in research design and statistics, behavior analysis and modification, industrial/organizational psychology, and human factors psychology, as well as current psychological theory and practice. The curriculum includes many Ohio Transfer 36 (OT36) courses and fulfills many general education requirements. This degree prepares students to directly enter the workforce and it transfers well to most 4-year colleges and universities.

## Career Opportunities

Graduates may be employed as research assistants, project/research coordinators, information analysts, behavioral skills technicians, and teaching/special education aides. Graduates also work as psychiatric and mental health technicians, case workers or managers, victim advocates, residential/group home specialists, and in a variety of positions where knowledge of human behavior and mental processes is beneficial (i.e. salesperson, human resources specialist, employee at not-for-profit agencies, administrative assistant, etc.).

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. Hr.(s)
- OT36 Arts \& Humanities Elective (from two or more disciplines) 6 Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective (must not be PSY) $\mathbf{3} \mathbf{C r}$. Hr.(s)
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PSY 2225 - Social Psychology
- PSY 2228 - Industrial Organizational Psychology
- PSY 2235 - Behavioral Science Research Methods
- PSY 2236 - Behavioral Science Statistics
- PSY 2250 - Behavior Modification
- PSY Applied Psychology Elective $3 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- Any course in catalog elective $\mathbf{3}$ Cr. Hr.(s)
- PSY 1160 - Black Psychology
- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2214 - Drugs \& Behavior
- PSY 2218 - Principles of Counseling
- PSY 2220 - Personality Psychology
- PSY 2242 - Educational Psychology
- PSY 2270 - Psychology Service Learning


## Architectural Technology, AAS

Program Code: ARC.S.AAS • Credit Hours: 62-65

## Description

The Architectural Technology program helps students develop skills applicable in a variety of Built Environment professions, including architectural, engineering and design practices, contracting firms, and material suppliers. Building Information modeling (BIM) and Integrated Project Design (IPD) are core principles taught throughout the curriculum, with Autodesk Revit being the primary BIM tool. Environmental responsibility is emphasized, with students taking a USGBC LEED exam prep course. Curriculum tracks are available for both building technology and building design.

## Career Opportunities

Graduates are employed as drafters for architectural firms, inspectors and project managers in the construction industry. Many opportunities exist in the building materials and assemblies sales and supply area.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 1341 - Architectural Design I
- CAT 2101 - Architectural Design II
- CAT 2201 - Architectural Visualization
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2700 - Architectural Technology Internship
- CAT 2780 - Architectural Technology Capstone
- COM 2211 - Effective Public Speaking
- EGV 1301-Architectural Energy Analysis
- EGV 2351 - LEED Green Associate Exam Preparation
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 1200-Technical Mathematics
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1100 - Introduction to Physics OR
- PHY 1141 - College Physics I
- Architectural Technology Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.

Architectural Technology Electives

- ART 1111 - Drawing I
- ART 1112 - Drawing II
- CAT 1131 - Introduction to Revit MEP
- CAT 1141 - Reading Architectural Drawings
- CAT 1161 - Introduction to the Built Environment
- CAT 1401 - Construction Cost Estimating
- CAT 2401 - Construction Project Management
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- CAT 2741 - Current Topics in Architecture
- EGV 1251 - Introduction to Energy Management Principles
- IND 1180 - History \& Theory of Interior Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2140 - Sustainable Design
- VIS 1140 - Design Processes I


## Automation \& Control Technology with Robotics, AAS

Program Code: AMCT.S.AAS • Credit Hours: 62-68

## Description

The Automation and Control Technology with Robotics program builds knowledge in the application of electrical and mechanical skills for developing, installing, programming and troubleshooting the complex machinery found in the modern manufacturing and Supply Chain environments.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

This program prepares graduates for control system technician and designer, electrical and electronic systems engineering technician, industrial equipment sales, purchasing, installation, and service. Graduates will also be prepared to assume roles as industrial maintenance technician, plant maintenance technician, robotics technician, system integrators, and supply chain technician.

Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 1131 - Digital Electronics OR
- EET 1198 - Digital Technology
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231-Troubleshooting of Automated Systems
- EGR 2252 - Teach Pendant Robot Programming
- EGR 2278 - Automation \& Control Capstone
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 2711 - Ethics for Engineering Technology Professionals
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- EET 2157 - Radio Frequency Identification (RFID) Technology OR
- EGR 2250 - Electromechanical Repair
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MET 1301-SolidWorks Basics
- EGR 2256 - Automated Data Acquisition Systems OR
- EGR 2261 - Engineering Problem Solving using "C" \& "C++" OR
- EGR 2275 - Automation \& Control Technology Internship OR
- EGR 2250 - Electromechanical Repair


## Automotive Technology (GM ASEP), AAS

## Program Code: ASEP.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in General Motors Automotive Service Educational Program (ASEP) provides training for students aspiring to become automotive technicians for General Motors dealerships or AC Delco independent shops. Specific General Motors training is presented to apprentice student technicians as they apply learned content to a co-op work experience. Students attend classes for half a semester and then apprentice at a GM/ AC Delco sponsoring dealership the other half. Students are paid for work rendered during the co-op experience. Upon graduation, students will
receive hundreds of hours of official General Motors training credits that are recorded in the corporation's training database. Graduates should be 85 to $90 \%$ trained towards meeting the certification requirements for a GM Master Technician. Graduates will also receive an Associate of Applied Science from Sinclair along with a job opportunity from the sponsoring dealer. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in General Motors dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness to work and a high degree of professionalism may expect to find jobs in middle management or research occupations within major automotive corporations.

## Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- AUT 1108 - Automotive Engine Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology

Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology (Honda PACT), AAS

## Program Code: AUTHA.S.AAS • Credit Hours: 65

## Description

This Associate of Applied Science program provides training for students aspiring to become Honda/Acura dealership technicians and requires students to co-op at a Honda or Acura dealership. Students receive specific Honda technical training resulting in training, credits/certifications from the corporation. These credits/ certifications help a student secure employment with a Honda/ Acura dealership.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Program Requirements

- AUT Automotive Elective $2 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology (Mopar CAP), AAS

## Program Code: CAP.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in the Mopar Career Automotive Program (CAP) provides training for students aspiring to become automotive technicians for Chrysler, Dodge, Jeep, and Ram dealerships. Specific Chrysler training is presented to apprentice student technicians as they apply learned content to a co-op work experience. Students attend classes for half a semester and then apprentice at a Fiat Chrysler Automobile sponsoring dealership the other half. Students are paid for work rendered during the co-op experience. Upon graduation, students will receive hundreds of hours of official Chrysler training credits that are recorded in the corporation's training database. Graduates should be $85 \%$ to $90 \%$ trained towards meeting the certification requirements for a Chrysler Master Technician. Graduates will also receive an Associate of Applied Science from Sinclair along with a job opportunity from the sponsoring dealer.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s),
please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in Chrysler, Dodge and Jeep dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness to work and a high degree of professionalism may expect to find jobs in middle management or research occupations within major automotive corporations.

## Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology

Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology, AAS

## Program Code: AUT.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in Automotive Technology provides training for students aspiring to become automotive technicians. Training in automotive management and business operations is a component of the program. To earn the associate degree students must participate in a capstone course offered only during the day or complete four paid internship courses with an automotive service facility.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE AccreditedTraining Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Graduates are finding excellent employment opportunities existing in dealerships, independent service facilities, machine shops and other automotive businesses. Graduates may also find employment as automotive instructors or sales, service and parts managers.

## Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- AUT 1170 - Automotive Internship I AND
- AUT 1171 - Automotive Internship II AND
- AUT 1172 - Automotive Internship III AND
- AUT 1173 - Automotive Internship IV OR
- AUT 2250 - Automotive Service Operations
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.

Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics

Aviation Maintenance Technology, AAS

## Program Code: AVIAO.S.AAS • Credit Hours: 89

## Description

This program leads to an Associate of Applied Science in Aviation Maintenance Technology and provides the knowledge and skills required by the Federal Aviation Administration (FAA) for certification as an Aviation Maintenance Technician (AMT). To become an AMT, two ratings are required, the Airframe (A) and the Powerplant (P); this is commonly referred to as an "A\&P Certificate". Students will complete the requirements for Sinclair's General, Airframe and Powerplant Aviation Maintenance certificates and will refine the knowledge and skills they have learned with extensive hands-on training in the aviation maintenance lab. Students, having completed this course work, will be eligible to test for the FAA A\&P Certificate. The graduate can either continue towards a bachelor's degree in aviation (or related field) or can begin a career as an AMT. Sinclair is an FAA-approved Aviation Maintenance Technician School (AMTS) under Part 147.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are
completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The programs General and Airframe certificates are approved by the FAA under air agency certificate XSCT086K.

## Career Opportunities

The Bureau of Labor Statistics projects "favorable future job opportunities" over the long term as older mechanics and technicians retire. Maintenance Repair Organizations (M.R.O.s) are contracting for the work that airlines used to do in house. Many of the M.R.O.s are in need of maintenance technicians. Boeing Commercial Aircraft Company recently predicted $1,000,000$ more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next 15-20 years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1106 - Airframe Safety Systems
- AVT 1107 - Fuel Systems
- AVT 1113 - Drawings for Aviation
- AVT 1116 - Regulations for Maintenance
- AVT 1118 - Weight \& Balance
- AVT 1128 - Powerplant Safety Systems
- AVT 2122 - Ignition \& Starting
- AVT 2126 - Reciprocating Engines
- AVT 2129 - Propellers
- AVT 2138 - Engine Fuel \& Fuel Metering
- AVT 2219 - Turbine Engines
- AVT 1132 - Basic Aviation Electricity II
- AVT 1133 - Instruments/Communications
- AVT 1135- Materials \& Processes
- AVT 1136 - Sheet Metal
- AVT 1213-Corrosion
- AVT 1214 - Cabin Atmospheric Control
- AVT 1218 - Utility Systems
- AVT 2121 - Assembly \& Rigging
- AVT 2132 - Airframe Electrical Systems
- AVT 2143 - Review \& Recommendation
- AVT 2236 - Non-Metallic Structures
- AVT 2237 - Aircraft Inspections
- AVT 2280 - Introduction to UAS Maintenance
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1106 - Physics for Technology
- PHY 1107 - Lab for Physics for Technology


## Aviation Technology, AAS

## Program Code: AVIAT.S.AAS • Credit Hours: 64

## Description

This program leads to an Associate of Applied Science in Aviation Technology. The student, having completed this course work, would have the background and skills to enter the aviation industry or continue towards a bachelor's degree in aviation science (or related field).

## Career Opportunities

Career opportunities are available in airline, corporate and general aviation. Growth in major, regional and low-cost airlines will increase demand for all types of aviation professionals in these companies. In addition, aviation professionals with higher levels of experience and education will have more robust job opportunities. A large number of the positions created in the coming years will be the result of older workers retiring from the industry, prompting the need for new hires.

## Program Requirements

- AVT Any Aviation Course 21 Cr. $\mathbf{H r}(\mathbf{s})$.
- AVT 1105 - Orientation to Aviation
- AVT 1119-Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1245-Aviation Law
- AVT 2125 - Developments in Aviation I
- AVT 2146 - Introduction to Airline Operations
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2700 - Aviation Internship
- COM 2206 - Interpersonal Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- MAT 1570 - Analytic Geometry \& Trigonometry
- MET 1131 - Personal Computer Applications for Engineering Technology
- PHY 1141-College Physics I


## Aviation Technology/Professional Pilot, AAS

## Program Code: APPAO.S.AAS • Credit Hours: 66-68

## Description

This program leads to an Associate of Applied Science in Aviation Technology/Professional Pilot and is designed for students who want to
pursue a career as a professional pilot. The student, having completed this course work, will have the background, skills and FAA credentials to enter the aviation industry as a professional pilot or continue towards obtaining an aviation bachelor's degree. Students may choose fixed wing or helicopter pilot pathways. The curriculum in the Professional Pilot program is rigorous and is designed for full time students to complete in 4 semesters. Students must maintain a minimum of a 2.5 GPA. Enrollment in the flight lab courses is limited and priority will be given to fulltime, degree seeking students. Part time students will be admitted on a space available basis. The student must obtain a Federal Aviation Administration (FAA) 2nd class medical certificate prior to enrolling in any of the flight labs.

In addition to standard tuition fees there are additional course and lab fees for each of the flight labs in the program. The flight lab fees are structured to cover the costs associated with the minimum flying hours required for each FAA certificate. Any additional flying time costs beyond the FAA minimums covered by the flight lab fee must be borne by the student. See the Department for the latest course and flight lab fee costs.

## Career Opportunities

Excellent career opportunities are available in airline, corporate and business aviation. The 2018 Boeing Pilot \& Technician Outlook, a respected industry forecast of personnel demand, projects that 790,000 new civil aviation pilots will be needed to fly and maintain the world fleet over the next 20 years. The forecast is inclusive of the commercial aviation, business aviation, and civil helicopter industries. The demand will stem from a mix of fleet growth, retirements, and attrition. PSA Airlines, a local regional airline, has a continuous need for new pilots and had excellent hiring incentive programs.

## Program Requirements

- AVT 1105-Orientation to Aviation
- AVT 1119-Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1254 - Flight Simulator Instruction
- AVT 1245 - Aviation Law
- AVT 2146 - Introduction to Airline Operations
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2247 - Aerodynamics \& Flight Mechanics I
- AVT 2258 - Flight Instructor Ground
- AVT 2700-Aviation Internship
- AVT 1110 - Private Pilot Ground School AND
- AVT 1124 - Private Pilot Flight Lab - Airplane Single Engine AND
- AVT 1170 - Instrument Pilot Ground School AND
- AVT 1224 - Instrument Pilot Flight Lab - Airplane Single Engine AND
- AVT 2250 - Commercial Pilot Ground AND
- AVT 2263 - Commercial Pilot Flight Lab - Airplane Single Engine AND
- AVT 2269 - Flight Instructor Flight Lab - Airplane Single Engine OR
- AVT 1111 - Helicopter Private Pilot Ground AND
- AVT 1126 - Private Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 1171 - Helicopter Instrument Pilot Ground AND
- AVT 1226 - Instrument Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2251 - Helicopter Commercial Pilot Ground AND
- AVT 2265 - Commercial Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2271 - Flight Instructor Flight Lab - Rotorcraft Helicopter
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I


## Biotechnology, AAS

## Program Code: BTN.S.AAS•Credit Hours: 61-64

## Description

The Associate of Applied Science in Biotechnology provides a full range of courses to prepare students for entry-level positions in the biotechnology field. The academic curriculum provides a background in historical development of biotechnology, bioethics, safety, reagent preparation, cell culture techniques, protein purification and analysis techniques, microbiology and fermentation methods, molecular biology (DNA) techniques and bioinformatics. With advances in molecular and cellular biology, the biotechnology industry has expanded in scope to include human diagnoses and therapeutics, agricultural and veterinary applications, food production and environmental cleanup.

## Career Opportunities

This degree program prepares graduates to enter the biotechnology workforce as entry-level technicians and conduct a variety of basic and advanced laboratory techniques used in biomedical research.

## Program Requirements

- BIO 1107 - Human Biology
- BIO 1111 - General Biology I AND
- BIO 1211 - General Biology II OR
- BIO 1171 - Principles of Biology I AND
- BIO 1272 - Principles of Biology II
- BIS 1120 - Introduction to Software Applications
- BTN 1110 - Biotechnology \& Bioethics
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- BTN 1130 - Biological Reagents Preparation
- BTN 1140 - Cell Culture
- BTN 2210 - Protein Purification \& Analysis
- BTN 2220 - Microbiology \& Fermentation Methods
- BTN 2230-Molecular Biology Techniques
- BTN 1201 - Biotechnology Careers OR
- BTN 2700 - Biotechnology Internship
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Business Information Systems, AAS

Program Code: BIS.S.AAS•Credit Hours: 60-61

## Description

Students in this program will learn advanced features in various software applications and will practice integrating multiple applications to be more productive. The degree includes a strong technology emphasis and sound business foundation with courses in accounting, economics, management and business math. The program will prepare software and information technology staff in all industries to work in teams, support internal and external customers, and use new technologies to maximize business productivity. Students will select one of four concentrations: software applications, computer support, business analytics, or medical office to gain expertise in their area of interest.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Association (CHEA).

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities, to name a few.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 2170 - BIS Capstone
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- Software Applications 18-19 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Business Data 18-19 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Medical Office 18-19 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Computer Support 18-19 Cr. $\mathbf{H r}(\mathbf{s})$.

Software Applications Concentration

- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1400 - Customer Service
- BIS 2270 - Business Information Systems Internship
- BIS or MAN/MRK Elective
- OT36 Natural \& Physical Sciences Elective

Business Data Concentration

- CIS 1140 - Information Systems Analysis \& Design
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- MAN 2155 - Management Information Systems
- CIS 2265 - Data Visualization with Tableau
- OT36 Natural \& Physical Sciences Elective


## Medical Office Concentration

- BIO 1121 - Human Anatomy \& Physiology I
- BIS 1400 - Customer Service
- BIS 2180-Medical Office Simulation
- BIS 2270 - Business Information Systems Internship
- HIM 1101 - Medical Terminology
- HIM 1201 - Introductory Medical Office Coding


## Computer Support Concentration

- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1400 - Customer Service
- BIS 2270 - Business Information Systems Internship
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2731-A+ Hardware \& Software


## Business Management, AAS

Program Code: GBM.S.AAS • Credit Hours: 60

## Description

This program emphasizes preparation for a wide variety of management-related positions. It is designed to provide a balance in technical business education along with general education courses while providing a considerable choice of electives and alternatives. Opportunities for managers include supervision, office managers, management trainees, assistant managers and owners within a variety of settings, including small and medium-size businesses, corporations, industries, non-profit organizations and governmental agencies.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 2270 - Management Internship OR
- MAN 2275 - Retail Management Capstone OR
- MAN 2279 - Business Management Capstone
- MAN 1107 - Foundations of Business
- MAN 1110 - International Business OR
- MAN 2110 - Introduction to Project Management
- MAN 2150 - Management \& Organizational Behavior
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective 3 Cr. Hr(s). OR
- OT36 Natural and Physical Science Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- Any Course in Catalog 18 Cr. $\mathbf{H r}(\mathbf{s})$.


## Business Management/Digital Marketing, AAS

Program Code: MRK.S.AAS • Credit Hours: 64-65

## Description

Digital Media has disrupted many of the traditional areas of business management. This program provides a broad-based study of digital marketing strategies including customer engagement and consumer behavior, social media, online reputation management, inbound marketing, advertising and branding, graphic design, and website development. Students will have the opportunity to learn new media theories, online consumer psychology and marketing approaches while developing hands on experience with digital marketing tools and techniques. All students will produce a portfolio of their digital marketing projects and benefit from an internship in the digital marketing field.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

According to a recent jobs survey from Adecco's Creative and Marketing Recruiting Division, "Inbound Marketing is on the rise" and many consumers are making their initial approach to a business using mobile media/smartphones, social media, social networks and search engines. Many marketing departments are not fully prepared to address this shift in consumer behavior. $82 \%$ of survey respondents indicated they don't have formal training in digital marketing and frequently learn on the job. Further, $60 \%$ of respondents think their company's digital marketing is ineffective. There is a significant need for a formalized education program in the digital marketing space. Employers are actively searching for candidates that have formalized education and experience in digital marketing. Within the digital marketing space, there are multiple career paths that a student can pursue. If a student has a passion for social media, there are positions available as a social media manager, social media project leader, social media designer, interactive content specialist and customer engagement manager. If a student is interested in broader aspects of digital marketing including website development, search engine optimization and measurement, there are many career options. Potential career paths could include coordinator, specialist, manager and even director roles in e-commerce, new media, website marketing, search engine optimization, web analytics, digital media, online marketing, paid
search, and digital optimization. Digital Marketing is an exciting career path with a wide assortment of career options from which to choose.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2236 - Consumer Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r . ~} \mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- VIS 1140 - Design Processes I
- BIS 1600 - Data Management \& Visualization OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- MRK 2250 - Digital Marketing Analytics


## Business Management/Entrepreneurship, AAS

Program Code: ENTR.S.AAS • Credit Hours: 60

## Description

This area of concentration within the Management degree program prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to general education courses and traditional management courses, the following key areas are emphasized: opportunities for entrepreneurs, financial plan development, marketing plan development and complete business plan development.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Students completing this degree can expect to be prepared to begin their own businesses or to work in larger companies in an entrepreneurial role.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1400-Customer Service
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management OR
- MRK 2135 - Digital Marketing
- MRK 2220 - Small Business Marketing
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Entrepreneurship Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.

Entrepreneurship Electives

- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2225-Sales Fundamentals


## Business Management/Supply Chain Management, AAS

## Program Code: SCM.S.AAS•Credit Hours: 60

## Description

The Business Management Supply Chain Management (SCM) concentration provides a broad-based study of organizational strategic plans, resources, roles, responsibilities and functions, while also focusing on management of supply chain activities. This study involves consideration and application of processes to develop coordinated supplier-to-customer systems, including: identifying needs for raw materials, supplies and components; developing specifications; computing quantity requirements; selecting sources and negotiating agreements; acquiring, transporting and storing inventory; managing and maintaining operations; and logistics management.

## Accreditation

This program is fully accredited by the Accreditation Council for Collegiate Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

SCM specialists have opportunities for management positions at all levels in virtually every type of business, throughout small and medium-sized businesses, corporations, industries, nonprofit organizations and government agencies. SCM involves coordinating supplier-to-customer systems, including: identifying the need for materials, computing quantity requirements, selecting sources and negotiating agreements, and logistics and transportation management.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- COM 2225 - Small Group Communication
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- HUM 1130 - Humanity \& the Challenge of Technology
- LAW 1101 - Business Law OR
- LAW 1102 - Consumer Law OR
- LAW 1104 - Employment Law
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2101 - Introduction to Supervision OR
- MAN 2140 - Human Resource Management
- MAN 2110 - Introduction to Project Management OR
- MAN 2155 - Management Information Systems
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2270 - Management Internship OR
- MAN 2279 - Business Management Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 2240 - Six Sigma: Green Belt


## Civil Engineering Technology, AAS

## Program Code: CEGT.S.AAS • Credit Hours: 60-64

## Description

In Civil Engineering Technology, students are prepared to work as technicians in the planning, design, construction and operation of the built environment in our civilized world. A strong background in basics of architectural and civil construction and in-depth study of advanced topics such as surveying, construction management and structural analysis prepares students to produce and use construction documents and perform basic design and analysis.

## Accreditation

The Civil Engineering Technology Associate degree (CEGT) is accredited through the Engineering Technology Accreditation Commission of ABET, www.abet.org., www.abet.org

## Program Requirements

- CAT 1161 - Introduction to the Built Environment
- CAT 1211 - Construction Materials Testing
- CAT 1205-Construction Engineering Technology
- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1401 - Construction Cost Estimating
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2301 - Land Development Design in Civil 3D
- CAT 2401 - Construction Project Management
- CAT 2421 - Soil Mechanics
- CAT 2431 - OSHA Construction Standards
- CAT 2501 - GPS \& GIS for Engineering Technology Professionals
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2701 - Civil Engineering Technology Internship
- CAT 2781 - Civil Engineering Technology Capstone
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 1200-Technical Mathematics
- PHY 1106 - Physics for Technology OR
- PHY 1141 - College Physics I
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- Construction Elective $5 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.

Construction Electives

- CAT 1301-Civil Construction CAD
- CAT 2425 - Introduction to Structural Analysis \& Design
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management


## Community and Public Service, AAS

## Program Code: CPS.S.AAS • Credit Hours: 63-65

## Description

The Community and Public Service Associate of Applied Science degree is for students that are interested in helping those in need to overcome difficulties and improve their lives. This program is built from three core certificates that provide students with the necessary skills and knowledge to be effective in a wide range of social, behavioral and psychological/mental health service settings. Courses in this curriculum will focus on achieving proficiency in the following areas: social work core knowledge, mental health, addiction, values, skills; social work ethics and theory, interviewing and documentation; group/organization and micro-level methodologies; collaboration and advocacy; understanding family dynamics, barriers to self-sufficiency, conflict resolution, cultural and social diversity issues, the relationship between social problems and institutional responses.

## Career Opportunities

Graduates are employable in a variety of social service settings, including area non-profits, behavioral health clinics, Montgomery County Job and Family Services, and Dayton Children's Hospital. Some of these options are available to students if they are willing to complete a degree in Social Work within a certain time frame.

## Program Requirements

- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 1106-Transition Skills OR
- SCC 1101 - First Year Experience
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective - $\mathbf{3}$ Cr. Hrs.
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2130 - Sociology of Family Violence
- SOC 2205 - Social Problems
- SOC 2226 - Criminology
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work
- OT36 Arts \& Humanities Elective - $\mathbf{3}$ Cr. Hrs.


## Computer Aided Manufacturing/CNC Technology, AAS

## Program Code: CAMCT.S.AAS • Credit Hours: 60

## Description

Graduates of the Computer Aided Manufacturing CNC certificate programs are candidates for the completion of this two-year associate degree option. Coursework includes tool and manufacturing processes, computers in engineering technology, quality control, and CNC applications. Facilities and equipment rank among the best in the nation, with more than four million dollars in conventional machining equipment and computer numerical control machines for laboratory use by students

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Careers are available for CNC operators, Programmers and Process Improvement Specialists.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 2204 - Computer Numerical Control Lathe Programming
- CAM 2212 - Computer Assisted Programming
- CAM 2225-Tool Design
- CAM 2780 - Computer Aided Manufacturing Capstone
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313-Coordinate Measurement
- MAT 1110 - Math for Technologists
- OT36 Arts and Humanities Elective - $\mathbf{3}$ Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective - $\mathbf{3}$ Cr. Hr.(s)
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology OR
- ISE 2240 - Six Sigma: Green Belt OR
- CAM 1180 - Welding \& Metal Joining I


## Computer Aided Manufacturing/Precision Machining, AAS

## Program Code: CAMPM.S.AAS • Credit Hours: 60

## Description

Graduates of the CAM precision machining certificate programs are candidates for completion of this two-year associate degree option. More in-depth focus is given to enhancing communication and mathematical skills. A greater development of knowledge in industrial courses is also emphasized, including such areas as tool design, computer numerical control, jig and fixture design, process engineering and basic statistics.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Careers are available for entry-level in the precision machining and tool-and-die industries.

Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 2225-Tool Design
- CAM 2781 - Precision Machining Capstone
- CAM 2700 - Computer Aided Manufacturing Internship
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists
- ISE 1313 - Coordinate Measurement OR
- ISE 2240 - Six Sigma: Green Belt OR
- CAM 2204 - Computer Numerical Control Lathe Programming OR
- CAM 1180 - Welding \& Metal Joining I
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.


## Computer Information Systems/Network Engineering, AAS

Program Code: NEEN.S.AAS•Credit Hours: 60

## Description

Students learn Cisco routing protocols, troubleshooting the routing protocols, components, methods and technologies required for network and Internet communications, operation of IP addressing services, network security threats and functions of common security appliances and applications, wireless network standards and components, basic switching concepts, operation of Cisco switches, Virtual Local Area Networks (VLANs) to create logically separate networks. Sinclair is a Regional Cisco Academy.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in IT include entry-level positions such as network administrators, network security analysts and network engineers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1411 - Introduction to Networks
- CIS 1510 - Windows Client Operating System OR
- CIS 2510 - Microsoft Windows Server Operating System OR
- CIS 2731 - A+ Hardware \& Software
- CIS 2165 - Database Management
- CIS 2416 - Routing \& Switching Essentials
- CIS 2421 - Scaling Networks
- CIS 2427 - IoT Fundamentals
- CIS 2640 - Network Security
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Computer Information Systems/Secure System Administration, AAS

Program Code: NEMA.S.AAS • Credit Hours: 61

## Description

Students are prepared in problem solving, designing and documenting programs, system and network administration, and computer operating systems. Students learn to manage and configure computers, using various operating systems, to provide critical network services to diverse clients in a secure manner. Security concepts that are vendor neutral and applicable to all system types are discussed; those concepts are then applied to specific systems using various operating systems. The overall objective, to securely and efficiently administer networked systems of client and server machines, is emphasized throughout.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Students learn to manage and configure computers, using various operating systems, to provide critical network services to
diverse clients in a secure manner. Security concepts that are vendor neutral and applicable to all system types are discussed; those concepts are then applied to specific systems using various operating systems. The overall objective to configure high standards of system and network security is emphasized throughout. Increased recognition of the need for secure systems and networks has provided significantly increased opportunities for those prepared to work in this field.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment OR
- CIS 2650 - Ethical Hacker
- CIS 2640 - Network Security
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r}$. Hr(s).
- SCC 1101 - First Year Experience


## Computer Information Systems/Software Development, AAS

Program Code: SODE.S.AAS • Credit Hours: 62

## Description

Students learn software programming and system design for entry-level software development positions. Students are prepared in logical problem solving, designing and documenting programs, network administration, microcomputer and network operating systems and business applications using current computer languages.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts and network engineers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1202 - C++ Software Development
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2207 - Data Structures \& Algorithms OR
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2222 - ASP.NET with C\#
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Art and Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience

Computer Information Systems/User Support, AAS

Program Code: USSU.S.AAS • Credit Hours: 62

## Description

Students learn hardware and software troubleshooting, personal computer and system maintenance, documentation and are prepared in logical problem solving, designing and documenting programs, computer and network operating systems and business applications using current computer languages.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Computer support specialists provide help and advice to people and organizations using computer software or equipment. Some, called computer network support specialists, support information technology (IT) employees within their organization. Others, called computer user support specialists, assist non-IT users who are having computer problems.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1510 - Windows Client Operating System
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- CIS 2427 - IoT Fundamentals
- CIS 2731 - A+ Hardware \& Software
- CIS Computer Information Systems Elective $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Computer Information Systems Electives

- CIS 1202 - C++ Software Development
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2212 - Java Software Development I
- CIS 2240 - Introduction to Mobile Applications
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2550 - Linux Operating System


## Computer Information Systems/Web Development, AAS

## Program Code: WEDE.S.AAS • Credit Hours: 63

## Description

Students design and develop websites and web applications and are prepared in logical problem solving, designing and documenting programs, microcomputer and network operating systems and business applications using current computer languages. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Today the world wide web dominates much of our daily lives and there is considerable need for those with the skills needed to create, deploy and maintain web content. Nearly every retailer of any size uses dynamic web content to display and sell their products. Other businesses and industries have similar need to host dynamic content regarding their organizations on the web. Those with the skills to manage these sites will have significant opportunities ahead.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 1375 - JavaScript
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2222 - ASP.NET with C\#
- CIS 2250 - Web Site Development with php
- CIS 2268 - Structured Query Language (SQL) Programming OR
- CIS 2207 - Data Structures \& Algorithms
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Construction Management Technology, AAS

Program Code: CMO.S.AAS•Credit Hours: 60-64

## Description

The Construction Management Technology program helps students develop skills related to managing the construction process including project planning and organization, safety, cost estimating, plan reading, surveying, current construction methods, modern building materials, and Building Information Modeling (BIM). Internship course is required.

## Career Opportunities

Graduates are employed as project managers, estimators, inspectors and craftsmen with residential, commercial and governmental agencies.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1211 - Construction Materials Testing
- CAT 1241 - Building Systems
- CAT 1401 - Construction Cost Estimating
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials
- CAT 2702 - Construction Management Technology Internship
- CAT 2782 - Construction Management Technology Capstone
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- EGV 2351 - LEED Green Associate Exam Preparation
- MAT 1110 - Math for Technologists OR
- MAT 1470-College Algebra OR
- MAT 1580 - Precalculus OR
- MAT 1200-Technical Mathematics
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- PHY 1100 - Introduction to Physics OR
- PHY 1141 - College Physics I
- Construction Technology Elective $\mathbf{4} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Construction Technology Electives

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1141 - Reading Architectural Drawings
- CAT 1205 - Construction Engineering Technology
- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1301-Civil Construction CAD
- CAT 1701 - Construction Craft Skills/Concrete
- CAT 1721 - Structural Framing Systems
- CAT 1741 - Residential Electrical Systems
- CAT 1761 - Interior \& Exterior Finishes
- CAT 1781 - Construction Project
- CAT 1810 - Construction Techniques I
- CAT 1820 - Construction Techniques II
- CAT 1830 - Construction Techniques III
- CAT 1840-Construction Techniques IV
- CAT 2201 - Architectural Visualization
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2581 - Legal Principles for Surveyors
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- MAT 2270 - Calculus \& Analytic Geometry I


## Correctional Rehabilitation, AAS

Program Code: CR.S.AAS • Credit Hours: 60

## Description

The Correctional Rehabilitation Associate of Applied Science will prepare students for a career assisting returning citizens in navigating the transition from incarceration to re-entry into the community. This program provides a broad-based study on navigating the criminal justice system as well as how to support someone in transition with their personal and professional goals. Upon completion, graduates will be qualified for careers within correctional rehabilitation that support individuals leaving incarceration and transitioning into their communities.

## Career Opportunities

Graduates of this program may find career opportunities in areas of reentry support such as rehabilitation and corrections, reentry services, community corrections, job and family services, and non-profit re-entry programming.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1106 - Transition Skills
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective - 3 Cr . Hr .(s)
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology
- OT36 Arts and Humanities 3 Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr.(s)


## Criminal Justice Science/Corrections, AAS

## Program Code: CJCO.S.AAS • Credit Hours: 60

## Description

This program is designed to combine the criminal justice concepts, theories and laws with practical application techniques and modern technology skills to prepare the Criminal Justice Science student for productive employment in corrections. The corrections track maintains cutting-edge curriculum that enhances critical thinking, written and oral communications, teamwork, leadership and assessment. The curriculum includes general education requirements, theory and practice courses and educational requirements in ethics, law and the current best practices in the field of criminal justice.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at student records@sinclair.edu.

Employment is available in the corrections field as correctional officers, security guards, county probation and parole officers, positions in commercial, school, and private security organizations, and correctional treatment specialists.

## Program Requirements

- BIO 1107 - Human Biology OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105-Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165-Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer Academy
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2270 - Criminal Justice Science Internship OR
- CJS 2295 - Criminal Justice Science Seminar
- COM 2245 - Intercultural Communication
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology


## Criminal Justice Science/Law Enforcement, AAS

## Program Code: CJLE.S.AAS • Credit Hours: 63

## Description

The Associate of Applied Science Degree in Criminal Justice prepares entry-level professionals from diverse backgrounds in theoretical foundations, knowledge, skills, and practices of criminal justice operations. This study enables students to develop rational decisions and informed responses to challenges facing law enforcement and criminal justice professionals today.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice/law enforcement including those in court systems, court administration, patrol, victim services, investigation, and probation/parole.

## Program Requirements

- BIO 1107 - Human Biology OR
- OT36 Natural \& Physical Sciences Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 1155 - Homeland Security Issues \& Administration
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2205 - Introduction to Criminal Investigation \& Forensic Science
- CJS 2209 - Computer Crime
- CJS 2270 - Criminal Justice Science Internship OR
- CJS 2295 - Criminal Justice Science Seminar
- COM 2245 - Intercultural Communication
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology


## Culinary Entrepreneurship, AAS

## Program Code: CENT.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science degree in Culinary Entrepreneurship has the right combination of Culinary, Business, and Entrepreneurship elements to meet the needs of motivated individuals that aspire to start their own restaurants and other food related businesses, to employ others, and to develop their brand recognition. Potential applications include development and oversight of businesses related to food operations in new restaurants, kiosks, food trucks, and other business models. The Culinary Entrepreneurship degree program at Sinclair College offers specialized credentials and provides content area knowledge that will allow graduates to realize their dreams of business ownership in the area of food production.

## Career Opportunities

An individual majoring in Culinary Entrepreneurship can explore the following career opportunities:
--Open Your Own Restaurant
--Start a Food Truck
--Go Virtual by considering owning Ghost Kitchen
--Become a Caterer
--Become Food Stylist
--Become a Food Consultant
--Mix Art and Science and become a Recipe Developer
--Become a Food Influencer
--Become the next TIK TOK sensation

Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225-Small Group Communication
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107-Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1129-Restaurant Desserts
- HMT 2203 - Street Foods \& Food Trucks
- HMT 2215 - Hospitality Cost Controls
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- MRK 2220 - Small Business Marketing
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Cyber Investigation Technology, AAS

Program Code: CYIT.S.AAS • Credit Hours: 61

## Description

The Cyber Investigation Technology degree will prepare students for careers in the areas of computer network protection, managing networks and operating systems, and IT criminal investigation, which includes evidence procedures and computer forensics. The degree incorporates preparation for industry-recognized certifications, articulated credit for Law Enforcement and Corrections entities, and transfer students for four-year degree transfer opportunities.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Job titles include but are not limited to: Intelligence Analyst, IT Specialist (Government Breakout Codes 2210), Systems Administrator, Network Engineer, Information System Security Manager, Cyber Security Incident Response Specialist and Private Investigator.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 2165 - Database Management
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment
- CIS 2640 - Network Security
- CIS 2731 - A+ Hardware \& Software
- CIS 2808 - Introduction to Computer Forensics
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2209 - Computer Crime
- CJS 2295 - Criminal Justice Science Seminar
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MAN 2150 - Management \& Organizational Behavior

Data Analytics, AAS

## Program Code: DATA.S.AAS • Credit Hours: 65

## Description

Students will be prepared for entry-level data analytics positions requiring knowledge, setup and usage of business intelligence and data analysis solutions. Students will have the ability to extract, curate, wrangle, and visualize data in a way that is meaningful to a variety of organizations. Course work will include database concepts, data modeling, Structured Query Language (SQL), data analysis and
visualization, data mining tools, mathematical and statistical techniques, project management and systems analysis. Emphasis is placed on strong communication skills necessary to interact with key stakeholders to achieve their desired objectives.

## Career Opportunities

Opportunities include positions such as Data Engineer, Data Analyst, Business Intelligence Analyst, Data Manager, Visualization Analyst, and Business Systems Analyst.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1455 - Introduction to Data Science
- MAT 2170 - Business Statistics I
- MAT 2180 - Business Statistics II
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Dental Hygiene, AAS

## Program Code: DEH.S.AAS • Credit Hours: 69

## Description

Working as part of a dental team, dental hygienists treat patients needing non-surgical periodontal therapy and radiographs, apply preventive agents, provide intra- and extra-oral exams and oral hygiene instructions. Registered dental hygienists work in private dental offices, public health settings, and in higher education. The Dental Hygiene program is designed to be completed in five (5) semesters on a fulltime basis when the student begins the technical portion of the program. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken
prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. In order to be invited into the Dental Hygiene Program all students must have a GPA of 2.7 with an overall TEAS score of 60 and a score on the sciences portion of the test of 50 . You have three opportunities to successfully take the TEAS. For any students applying under the Accelerated Admission for Academic Achievement (AAAA) you must have a GPA of 3.0 with an overall TEAS score of 65 and a science score of 55 . A student may take the TEAS test two times for consideration. In addition, you must earn an or A or B in all required biology and chemistry courses. Complete CHE 1111/CHE 1151 (Introduction to Chemistry I) or provide proof of High School chemistry with a C or better within past 5 years to the Dental Health Sciences Department.

## Accreditation

The program in Dental Hygiene at Sinclair Community College is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of Approval (without reporting requirements). The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (800) 621-8099 or (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611-2678.

## Career Opportunities

Career options may vary according to state practice act restrictions. Dental hygienists have a variety of career opportunities in a wide range of employment settings, including private practice, hospitals, HMO's, community health programs, long-term care facilities, school systems, dental product research, marketing and sales, military bases, universities and research centers.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- DEH 1102 - Introduction to Dental Hygiene AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology
- DEH 1102 - Introduction to Dental Hygiene
- DEH 1202 - Head, Neck \& Dental Anatomy
- DEH 1203 - Lab for Head, Neck \& Dental Anatomy
- DEH 1204 - Preclinical Dental Hygiene I
- DEH 1205 - Lab for Preclinical Dental Hygiene I
- DEH 1206 - Nutrition \& Oral Health
- DEH 1302 - Preclinical Dental Hygiene II
- DEH 1303 - Lab for Preclinical Dental Hygiene II
- DEH 1304 - Oral Histology \& Embryology
- DEH 1305 - Medical Emergencies in Dental Practice
- DEH 1306 - General \& Oral Pathology
- DEH 1308 - Dental Radiology
- DEH 1309 - Lab for Dental Radiology
- DEH 2402 - Clinical Dental Hygiene I
- DEH 2403 - Dental Hygiene Clinic I
- DEH 2502 - Pharmacology in the Dental Practice
- DEH 2503 - Pain Control in the Dental Practice
- DEH 2504 - Dental Hygiene Research
- DEH 2506 - Dental Materials
- DEH 2507 - Lab for Dental Materials
- DEH 2508 - Clinical Dental Hygiene II
- DEH 2509 - Dental Hygiene Clinic II
- DEH 2601 - Community Dental Health
- DEH 2602 - Clinical Dental Hygiene III
- DEH 2603 - Dental Hygiene Clinic III
- DEH 2604 - Dental Hygiene Practice
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology


## Digital Media Design, AAS

## Program Code: DMD.S.AAS • Credit Hours: 62-65

## Description

The Associate of Applied Science degree in Digital Media Design will prepare students for careers and transfer degrees in digital media. In this interdisciplinary program, students select a pathway specific to their interest -- Video Production or Web Design. The program is creative, fast paced, and in demand by most businesses. Students will develop the knowledge and technical skills necessary to produce and design quality videos or web applications. Creativity, problem-solving and the design process are stressed. Advanced computer skills, portfolio development and job-seeking strategies are also incorporated into the curriculum.

## Career Opportunities

Graduates from this program will be able to obtain positions in the field of video production (television, internet, live broadcasts, home or other purposes) or web design (web designer and coding, user experience/user interface design, search engine optimization, and motion design).

## Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods OR
- ART 2235 - History of Photography
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 2130 - Motion Design
- VIS 2260 - Design Portfolio
- Video Production Pathway 28-30 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Web Design Pathway 28-30 Cr. $\mathbf{H r}(\mathbf{s})$.

Video Production Pathway

- AVT 1103 - Remote Pilot Ground School
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design
- VIS 2180 - Video Principles
- VIS 2190 - Video Applications I
- VIS 2200 - Video Applications II

Video Production Pathway Electives

Choose one course for Video Production Pathway elective:

- ART 2265 - Digital Color Photography I
- ENG 2256 - Fiction Writing
- MRK 2135 - Digital Marketing

Web Design Pathway

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design
- VIS 2140 - Web Principles
- VIS 2150 - Web Applications
- VIS 2170 - Web Content Management

Web Design Pathway Electives

Choose one course for Web Design Pathway elective:

- ART 2265 - Digital Color Photography I
- CIS 1375 - JavaScript
- IND 1240 - Color Theory
- MRK 2135 - Digital Marketing
- VIS 1420 - Video Production


## Early Childhood Education, AAS

Program Code: ECE.S.AAS • Credit Hours: 63

## Description

This program provides the knowledge, skills and competencies important to an entry-level teacher working with, or planning to work with, young children. The program includes the academic preparation required by the Ohio Department of Education to meet PreKindergarten Associate Teacher Licensure standards.
Students interested in completing this degree program must have a full criminal background investigation completed before enrolling in the final practicum course. A grade of " C " or better is required in all courses.

## Career Opportunities

Graduates may work as pre-kindergarten associate licensed teachers, child care center directors, infant-toddler teachers, and paraprofessionals in public schools or as school age child care coordinators.

Program Requirements

- COM 2211 - Effective Public Speaking
- ECE 1100 - Introduction to Early Childhood Education
- ECE 1101 - Introductory Child Development
- ECE 1200-Observation \& Assessment
- ECE 1201 - Curriculum \& Planning
- ECE 1202 - Healthy \& Safe Environments
- ECE 2103 - Literacy, Art \& Music
- ECE 2104 - Math, Science \& Social Studies
- ECE 2105 - Professionalism in Early Childhood Education
- ECE 2200 - Families, Communities \& Schools
- ECE 2201 - Guidance of Young Children
- ECE 2302 - Infant \& Toddler Curriculum
- ECE 2301 - Early Childhood Education Practicum OR
- ECE 2303 - Early Childhood Education Practicum Part 1 AND
- ECE 2304 - Early Childhood Education Practicum Part 2
- EDU 1100 - Introduction to Education
- EDU 1105 - Individuals with Exceptionalities
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).
- PSY 1100 - General Psychology
- PSY 2242 - Educational Psychology


## Electrical Construction Management, AAS

Program Code: ECM.S.AAS • Credit Hours 60-61

## Description

This Associate of Applied Science (AAS) degree is designed for electrical apprenticeship skilled trades students, providing supervisory, management and leadership skills. Students already in programs such as NCCER, IEC, and JATC can take this AAS concurrently with their respective apprenticeship program. This degree will fulfill the needs of the electrical construction industry by providing an associate degree pathway to electrical construction management while simultaneously completing an approved apprenticeship program. Provides the necessary training for journeyman electricians to gain necessary knowledge for job site leadership positions such as electrical foreman, maintenance technician supervisor, manufacturing industry electrician, and to start/run their own contracting business.

## Career Opportunities

Careers might include electrical construction project manager, electrical superintendent, lead electrician, maintenance supervisor, estimating manager, or small business owner.

## Prerequisites

- Approval of Department


## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CAT 1431 - OSHA Construction Standards 10 Hour OR
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- EET 1181 - Electrical Construction I AND
- EET 1182 - Electrical Construction II AND
- EET 1183 - Electrical Construction III AND
- EET 1184 - Electrical Construction IV OR
- EET 1120 - Introduction to DC \& AC Circuits AND
- EGR 1106-Basic Mechanical \& Electrical Skills
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2110 - Introduction to Project Management
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts and Humanities $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective\  3 Cr. $\mathrm{Hr}(\mathbf{s})$.


## Program Code: EMET.S.AAS • Credit Hours: 63-64

## Description

This program prepares students for a career in Mechatronics by combining knowledge of mechanical technology with knowledge of electrical and electronic circuits. The program prepares students to operate, test, and maintain unmanned, automated, robotic, or electromechanical equipment. The degree includes traditional classroom instruction, and hands-on laboratory experiences every semester.

## Career Opportunities

Prepares students for a career in advanced manufacturing, defense industry, semi-conductor manufacturing sector, high tech logistics/warehousing, consulting, technical sales, or related field.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 1198 - Digital Technology
- EET 2281 - Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2278 - Automation \& Control Capstone OR
- EGR 2279 - Mechatronics Capstone
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1131 - Personal Computer Applications for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 1301 - SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process
- MET 2281 - Engineering Technology Professional Practice
- OT36 Natural and Physical Sciences Elective 4 Cr. Hr.(s).
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr.(s)


## Program Code: END.S.AAS • Credit Hours: 64-65

## Description

The associate degree program in Electroneurodiagnostic Technology prepares competent entry-level Neurodiagnostic Technologists, specializing in Electroencelphagrams (EEG) with additional expertise in the following additional areas: Evoked Potentials (EP); Intraoperative Neuromonitoring (IONM); Nerve Conduction Students (NCS) and Polysomnography (PSG), in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Electroneurodiagnostic is the allied health care profession that records, monitors, and analyzes nervous system functions to promote the effective treatment of pathologic conditions. Technologists record electrical activity arising from the brain, spinal cord, peripheral nerves, somatosensory or motor nerve systems using a variety of techniques and instruments. Technologists prepare data and documentation for interpretation by a physician. As part of the program, the students will complete a non-paid, supervised health-related practicum in a medical setting. A grade of "C" or higher is required in all program courses to remain in the program.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College's Electroneurodiagnostic Technology program is accredited by the Commission on Accreditation of Allied Health Education Program (CAAHEP:
https://www.caahep.org/Home.aspx). The Committee on Accreditation for Education in Neurodiagnostic Technology (CoA-NDT) and CAAHEP's board of Directors recognized the programs substantial compliance with the nationally established accreditation standards. Commission on Accreditation of Allied Health Education Programs, 9355 113th St. N, \#7709 Seminole, FL 33775 Phone: 727-210-2350
Fax: 727-210-2354

## Career Opportunities

Employment may be found in hospitals, out-patient clinics and surgical centers.

## Program Prerequisite(s):

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- END 1101 - Introduction to Electroneurodiagnostic Technology AND
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics AND
- Approval of Department AND
- GPA of 2.0 and TEAS Exam


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1110 - Principles of Electrocardiography
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I OR
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- END 1101 - Introduction to Electroneurodiagnostic Technology
- END 1102 - Introduction to Electroencephalography (EEG)
- END 1182 - Lab for Intro to EEG
- END 1250 - Intermediate Electroencephalography (EEG)
- END 1260 - Basic Evoked Potentials
- END 1285 - Lab for Intermediate EEG
- END 1286 - Lab for Basic Evoked Potentials
- END 1901 - Seminar for END Practicum I
- END 1991 - Practicum Experience I for END
- END 2350 - Intraoperative Monitoring for Electroneurodiagnostic Technologists
- END 2360 - Neonatal/Pediatric Electroneurodiagnostic
- END 2386 - Lab for Neonatal/Pediatric EEG
- END 2450 - Nerve Conduction Studies
- END 2460 - Neurophysiology of Electroencephalography/Sleep Disorders
- END 2485 - Lab for Nerve Conduction Studies
- END 2550 - Fundamentals of Polysomnography
- END 2585 - Lab for Polysomnography
- END 2902 - Seminar for END Practicum II
- END 2903 - Seminar for END Practicum III
- END 2990 - Electroneurodiagnostic Capstone
- END 2992 - END Practicum II
- END 2993 - END Practicum III
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- PSY 1100 - General Psychology


## Electronics Engineering Technology, AAS

Program Code: EET.S.AAS • Credit Hours: 60-62

- MAT 1470 - College Algebra OR


## Description

The Electronics Engineering Technology (EET) program provides students with exciting opportunities to put engineering technology concepts into practice. The curriculum balances instruction in theory with hands-on laboratory applications. A strong background in basics and in-depth study of advanced topics gives students careers in diversified areas, such as digital systems, microcomputers, programmable logic controllers, and analog systems. The program has modern state-of-the-art equipped laboratories and a highly qualified faculty. Those who wish to further their studies are well prepared for entry into the best four-year electronics engineering technology programs

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Accredited by Engineering Technology Accreditation Commission of ABET, Inc., www.abet.org

## Career Opportunities

Prepares graduates for careers in electronics technician troubleshooting with testing equipment and assisting engineers with design and fabrication.

## Program Requirements

- COM 2211 - Effective Public Speaking
- EET Electronics Elective $\mathbf{3} \mathbf{C r} . \operatorname{Hr}(\mathbf{s})$.
- EET 1116 - Electronics Schematics \& Fabrication
- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155 - AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EET 2278 - Electronics Project Capstone
- EET 2281 - Programmable Logic Controllers
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1101 - English Composition I
- MAT 1580 - Precalculus OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry
- MET 2711 - Ethics for Engineering Technology Professionals
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 C r} \mathbf{~ H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- EET 2157 - Radio Frequency Identification (RFID) Technology
- EET 2257 - Radio Frequency Identification (RFID) Capstone
- EET 2270 - Electronics Engineering Technology Internship
- EET 2282 - Advanced Programmable Logic Controllers
- PHY 1142 - College Physics II


## Emergency Medical Services, AAS

Program Code: EMSVS.S.AAS • Credit Hours: 60-61

## Description

The Emergency Medical Services (EMS) degree is designed to augment the skills of the practicing paramedic. Paramedics are challenged with a variety of courses to increase their skill sets in areas of EMS management and out-of-hospital critical care medicine. Students will gain experience from currently practicing paramedics, fire fighters and managers. This degree allows students to capitalize on their paramedic education, positioning themselves for advancement within the fire service. A grade of "C" or better is required in all technical-level courses. Interested students should contact the EMS offices at 937-512-5338 or contact an academic advisor.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The EMT certification course meets the Ohio Division of EMS accreditation standards. The paramedic certification course meets the Ohio Division of EMS and CAAHEP accreditation standards.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidate's state licensures/ certifications - not whether the candidate is degreed. The associate degree can provide students with knowledge and skills needed to advance within an EMS career.

## Program Prerequisite(s)

- EMS 1150 - Emergency Medical Technician: Lecture AND
- EMS 1155 - Laboratory for Emergency Medical Technician


## Program Requirements

Electronics Electives

- BIO 1141 - Principles of Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- EMS 1150-Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for Emergency Medical Services Provider
- EMS 2105 - Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175 - Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- EMS 2300 - Critical Care Paramedic 1 OR
- EMS 2305 - Critical Care Paramedic 2 OR
- EMS 2310 - EMS Management 1 OR
- EMS 2315 - EMS Management 2
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- PSY 1100 - General Psychology


## Emergency Medical Services/Fire Science, AAS

## Program Code: EMSFO.S.AAS • Credit Hours: 64-65

## Description

The Emergency Medical Services (EMS) Fire Science option is designed to augment the skills of the practicing paramedic. Paramedics are challenged with a variety of courses to increase their skill sets in fire technical areas. Students will gain experience from currently practicing paramedics, fire fighters and managers. This degree allows students to capitalize on their paramedic education, positioning themselves for advancement within the fire service. A grade of " C " or better is required in all technical-level courses. Interested students should contact the EMS offices at (937) 512-5338 or contact an academic adviser.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under
age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The certificates within the degree meet accreditation standards. The EMT certificate meets the Ohio Division of EMS accreditation standards. The Paramedic certificate meets the Ohio Division of EMS and the CAAHEP accreditation standards. The professional firefighting program is in compliance with all appropriate state laws/ rules.

## Career Opportunities

Careers with the fire service are beginning to change. Most departments will not require a degree for an entry level position. But departments are beginning to acknowledge the degree and give some preference for those entry level applicants with degrees. It is clear that to advance or get promotions with the fire services, degrees are needed.

## Program Prerequisite(s)

- EMS 1150 - Emergency Medical Technician: Lecture AND
- EMS 1155 - Laboratory for Emergency Medical Technician


## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for Emergency Medical Services Provider
- EMS 2105 - Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175 - Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- ENG 1101 - English Composition I
- PSY 1100 - General Psychology
- COM 2211 - Effective Public Speaking OR
- COM 2206 - Interpersonal Communication
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Fire Science Technology/Fire Administration, AAS

## Program Code: FAO.S.AAS • Credit Hours: 63

## Description

This program provides the education and skills needed by the fire service professional to function in the emergency services field. Courses include administration, inspection, investigation, building construction, fire hydraulics and water suppression systems. Graduates are prepared to enter the workforce as firefighters, fire officers, investigators, inspectors, instructors, or continue their education in fire science or public administration.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Firefighter I, II, Fire Safety Inspector, and Fire Instructor Classes are certification courses through the Ohio Department of Public Safety. Also Firefighter I and II, Fire Instructor I and Fire Officer I and II are accredited by the National Board on Fire Service Professional Qualifications. We are currently in the process of extending ProBoard certification to Fire Instructor II, Fire Officer III and Fire Officer IV.

## Career Opportunities

In the next decade a majority of career fire service professionals with 25 plus years' service will be retiring under the State of Ohio "Deferred Retirement Option Plan (DROP)". Replacement employees will be needed to fill openings not only for entry-level positions, but promotions in the officer ranks as well.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- FST 1102 - Firefighter I
- FST 1103 - Firefighter II Transition
- FST 1120 - Fire Safety Inspector
- FST 1125 - Fire Investigation I
- FST 1403 - Live Fire Instructor
- FST 1442 - Emergency Vehicle Operator
- FST 2209 - Fire Service Instructor
- FST 2251 - Fire Officer I
- FST 2252 - Fire Officer II
- FST 2253 - Fire Officer III
- FST 2254 - Fire Officer IV
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- PSY 1100 - General Psychology
- MAT 1120 - Business Mathematics OR
- MAT 1130-Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).


## Geospatial Technology, AAS

## Program Code: GST.S.AAS • Credit Hours: 61-63

## Description

The Associate of Applied Science degree in Geospatial Technologies will prepare students for careers and transfer degrees in geographical information systems (GIS). In this interdisciplinary program, students select a pathway specific to their interest - GIS Analyst, GIS Programming Specialist, or Aerial Sensing Data Analyst. In this profession, graduates are responsible for collecting geospatial data, producing maps, analyzing spatial data, coordinating GIS projects, providing technical expertise to clients or users, and providing programming and software development expertise.

## Career Opportunities

Approximately $80 \%$ of all data have a spatial or location-based component. The geospatial industry and market for it continue to expand at a phenomenal rate. The latest Dept. of Labor statistics show more than 850,000 current geospatial workers with an additional 350,000 needed by 2018. Professionals in GIS are needed in organizations of all sizes and in almost every industry, including, agriculture, health care, retail trade, urban planning, law enforcement, defense and intelligence, natural resources, utilities, marketing,unmanned aerial systems and engineering among others.

## Program Requirements

- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- GEO 1101 - Global Forces, Local Diversity
- GEO 1102 - Earth's Physical Environment OR
- GEO 1300 - Introduction to Weather \& Climate
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1209 - Map Design \& Visualization
- GEO 1212 - Geospatial Data Acquisition \& Management
- GEO 2210 - Advanced Spatial Analysis
- GEO 2600 - Geospatial Technology Capstone OR
- GEO 2700-Geospatial Technology Internship
- MAT 1450 - Introductory Statistics
- MAT 1470 - College Algebra
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural \& Physical Sciences Elective $3 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- GIS Aerial Data Sensing Analyst Pathway 6-8 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- GIS Analyst Pathway 6-8 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- GIS Programming Specialist Pathway 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.

GIS Aerial Data Sensing Analyst Pathway

- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis
- AVT 1123 - Acoustic \& CBRNE Data Analysis
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization

GIS Analyst Pathway

- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1215 - Introduction to Remotely Sensed Imagery OR
- EET 1121 - UAS Remote Sensing \& Analysis AND
- EET 1158 - Aerospace Spatial Visualization

GIS Programming Specialist Pathway

- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 1350 - Web Site Development with HTML \& CSS


## Health Information Management, AAS

## Program Code: HIM.S.AAS • Credit Hours: 62

## Description

Health Information Management (HIM) professionals are experts in the field of managing and protecting patient health information, administering computer information systems, and coding the diagnoses and procedures for health care services provided to patients in accordance with medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system.

The Health Information Management program is designed to be completed in five (5) semesters on a full-time basis. Students preferring to complete on a part-time basis may take longer than five sequential semesters. The degree program consists of open-enrollment courses and program-specific courses with limited enrollment. The open-enrollment courses may be taken prior to entry into the limitedenrollment courses. Most second-year HIM courses are limited-
enrollment courses. All courses in the program are available online. To qualify for entry to limited-enrollment courses, please see the Applicant Information packet located on the HIM program webpage. A minimum cumulative GPA of 2.0 and completion of prerequisite courses are required. A grade of " C " or higher is required in all program courses.

The curriculum includes a professional practice experience (PPE) that occurs virtually with HIM professionals. Students work online with professionals to experience HIM processes, projects, and "a day in the life". Generally, these experiences occur online during daytime business hours, however, many sessions are recorded and can be accomplished asynchronously.
.Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Health Information Management program is fully accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Upon successful completion of the HIM program, students are eligible to take the national certification exam to obtain the Registered Health Information Technician (RHIT) credential.

## Career Opportunities

Employment prospects continue to be excellent throughout the nation. HIM graduates work in hospitals, clinics, ambulatory care centers, skilled nursing facilities, rehabilitation centers, long term care facilities, mental healthcare and psychiatric facilities, home healthcare agencies, hospice facilities, physician offices, managed healthcare plans, insurance companies, law firms, colleges and universities, state and federal agencies, consulting firms, medical research institutions, and companies that market health information products and services.

## Program Prerequisite(s)

- BIO 1121 - Human Anatomy \& Physiology I AND
- HIM 1101 - Medical Terminology


## Program Requirements

- ALH 1140 - Fundamentals of Disease Processes
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1221 - Specialized Computer Applications for Health Information Management
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 1217 - Alternative Health Records \& Registries
- HIM 2110 - Ambulatory Coding
- HIM 2144 - Quality Improvement, Statistics \& Research
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2211 - Inpatient Coding
- HIM 2233 - Healthcare Information Systems
- HIM 2252 - Professional Practice Experience
- HIM 2278 - Health Information Management Capstone
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Health Sciences, AAS

## Program Code: HS.S.AAS • Credit Hours: 64-68

## Description

The associate of applied science degree in Health Sciences provides students with a general degree in the health science field. Students with technical certificates or college credits in allied health courses can apply their credits toward the AAS. Graduates will be able to enter a health-related field, or continue their education toward a Bachelor's of Science degree at a four-year university.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SCC 1101 - First Year Experience
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211-General Chemistry I OR
- BIO 1121 - Human Anatomy \& Physiology I AND
- BIO 1222 - Human Anatomy \& Physiology II OR
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- Health Sciences Technical Elective $\mathbf{2 7}$ Cr. $\mathbf{H r}(\mathbf{s})$.

Health Sciences Technical Electives

- AGR 1160 - Introduction to Agriculture Science
- ALH 1103-Test Taking Strategies
- ALH 1105 - Overview of Holistic Health
- ALH 1110 - Principles of Electrocardiography
- ALH 1113-Clinical Phlebotomy
- ALH 1114 - Clinical Phlebotomy Practice
- ALH 1120 - Nurse Aide Training
- ALH 1121 - Acute Care Nurse Aide
- ALH 1122 - Pharmacy Technician I
- ALH 1123 - Pharmacy Technician II
- ALH 1124 - Pharmacy Technician Directed Practice
- ALH 1130 - Basic Life Support Training for Healthcare Provider
- ALH 1132 - Heartsaver First Aid, CPR \& AED
- ALH 1140 - Fundamentals of Disease Processes
- ALH 1183 - Pharmacy Technician Lab
- ALH 1250 - Health Science Practicum
- ALH 2201 - Survey of Drug Therapy
- ALH 2202 - General Pharmacology
- ALH 2220 - Pathophysiology
- BIO 1107 - Human Biology
- BIO 1111 - General Biology I
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1171 - Principles of Biology I
- BIO 1211 - General Biology II
- BIO 1222 - Human Anatomy \& Physiology II
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1272 - Principles of Biology II
- BIO 2205 - Microbiology
- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1221 - Specialized Computer Applications for Health Information Management
- BIS 1400 - Customer Service
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- CHE 1111 - Introduction to Chemistry I
- CHE 1121 - Introduction to Chemistry II
- CHE 1211 - General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 2111 - Organic Chemistry I
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2165 - Database Management
- CIS 2269 - Data Analytics Theory \& Solutions
- CLT 1200 - Introduction to Clinical Laboratory
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2225 - Small Group Communication
- DAS 1102 - Introduction to Dental Assisting Terminology
- DAS 1104 - Dental Assisting Techniques \& Materials I
- DAS 1108 - Dental Assisting Office Management
- DAS 1204 - Dental Assisting Techniques \& Materials II
- DAS 1206 - Dental Assisting Radiography
- DEH 1102 - Introduction to Dental Hygiene
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 1111 - Nutrition for Health \& Fitness
- DIT 1210 - Medical Terminology for Dietetics
- DIT 1525 - Human Nutrition
- DIT 1630 - Nutrition Through the Lifecycle
- DIT 1635-Community Nutrition
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2180 - Medical Nutrition Therapy for Dietary Managers
- DIT 2190 - Dietary Managers Nutrition Clinical
- DIT 2240 - Motivational Interviewing, Nutrition Counseling \& Communication
- DIT 2305 - Food, Culture \& Cuisine
- DIT 2310 - Lab for Food, Culture \& Cuisine
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2735 - Foodservice Retail Business Management \& Mid-Program Assessment
- DIT 2740 - Retail Business Management Directed Practicum
- EFD 1102 - Dental Anatomy for Dental Auxiliaries
- EFD 1202 - Expanded Functions for Dental Auxiliaries I
- EFD 1203 - Lab for Expanded Functions for Dental Auxiliaries I
- EFD 1302 - Expanded Functions for Dental Auxiliaries II
- EFD 1303 - Lab for Expanded Functions for Dental Auxiliaries II
- EMS 1150-Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- END 1101 - Introduction to Electroneurodiagnostic Technology
- END 1891 - Polysomnography Practicum
- END 2460 - Neurophysiology of Electroencephalography/Sleep Disorders
- END 2550 - Fundamentals of Polysomnography
- ENS 1116 - Exercise Science \& Health Promotion
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 1214 - Personal \& Community Health Behavior
- ENS 2318 - Fitness Assessment \& Exercise Prescription
- ENS 2417 - Methods of Teaching
- ENS 2420 - Concepts of Lifestyle Coaching
- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1160 - Medical Office Coding Concepts
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 1217 - Alternative Health Records \& Registries
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2233 - Healthcare Information Systems
- HIM 2262 - Advanced Medical Office Coding
- HMT 1101 - Basic Culinary Skills
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- MAN 1107 - Foundations of Business
- MAS 1110-Administrative Medical Assisting
- MAS 1130-Reimbursement Specialist Practicum
- MAS 2210 - Medical Billing Specialist
- MAT 1120 - Business Mathematics
- MAT 1130 - Mathematics in Health Sciences
- MAT 1445-Quantitative Reasoning
- MAT 1450 - Introductory Statistics
- MAT 1460 - Mathematics for Business Analysis
- MAT 1470 - College Algebra
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 1202 - Motivational Interviewing
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2137-Treatment Techniques in Substance Use Disorders
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2235 - Family Dynamics of Addiction
- MHT 2253 - Issues in Chemical Dependency
- NSG 1111 - Introduction to Nursing
- NSG 1200 - Introduction to Nursing
- OTA 1111 - Introduction to Occupational Therapy Assistant
- PHI 2206 - Introduction to Ethics
- PHY 1106 - Physics for Technology
- PSY 1160 - Black Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PTA 1000 - Introduction to Physical Therapy
- RAT 1101 - Introduction to Radiologic Technology
- RAT 2640 - Computed Tomography Practicum
- RAT 2641 - Principles of Computed Tomography
- RAT 2643 - Principles of Magnetic Resonance Imaging
- RAT 2644 - Applications of Magnetic Resonance Imaging
- RAT 2645 - Magnetic Resonance Imaging Practicum
- RAT 2647 - Principles of Mammography
- RAT 2649 - Mammography Practicum
- RET 1100 - Introduction to Respiratory Care
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2205 - Social Problems
- SOC 2215 - Race \& Ethnicity
- SUT 1100 - Sterile Processing I
- SUT 1101 - Tissue Banking I
- SUT 1107 - Lab for Tissue Banking I
- SUT 1200 - Sterile Processing II
- SUT 2101 - Tissue Banking II
- SUT 2107 - Practicum for Tissue Banking II
- SWK 2207 - Anti-Oppressive Social Work
- VET 1102 - Introduction to Veterinary Technology I VET 1120 - Introduction to Large Animal Sciences: Handling \& Husbandry
- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2220 - Principles of Large Animal Reproduction
- VET 2225 - Principles of Large Animal Nutrition


## Heating, Ventilating, Air Conditioning \& Refrigeration (HVACR) Technology, AAS

## Program Code: HVACR.S.AAS • Credit Hours: 60

## Description

This degree is designed for entry-level students pursuing careers in the HVAC-R industries, as well as experienced technicians in need of upgrade training. The program focuses on the basic operating principles of commercial and industrial HVAC systems, allowing one to pursue careers in sales, service, facilities operation, project management, laboratory technician, building automation, and even design. These principles are presented through lecture and laboratory exercises in a step-by-step fashion by addressing refrigeration, heating, distribution, filtration and control as individual subsystems. Upper-level courses tie the subsystems together to discuss how they interact, providing the HVAC-R technician or designer with knowledge regarding proper system operation.

## Career Opportunities

The program focuses on the basic operating principles of commercial and industrial HVAC systems, allowing one to pursue careers in sales, service, facilities operation, project management, laboratory technician, building automation, design, and many other niche and introductory technologies in HVAC.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1131 - Introduction to Revit MEP
- CAT 1601 - Building Electric \& Controls
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings
- HVA 1301-Air \& Water Distribution Systems
- HVA 1352 - Psychrometrics, Health \& Comfort in HVAC
- HVA 1401 - HVAC Mechanical \& Electrical Troubleshooting
- HVA 2251 - Primary HVAC Equipment Operation \& Selection
- HVA 2351 - HVAC Systems \& Controls
- HVA 2780 - HVACR Engineering Technology Capstone Project
- MAT 1110 - Math for Technologists OR
- MAT 1200-Technical Mathematics
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- HVACR Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.


## HVACR Electives

- CAT 1201 - Construction Methods \& Materials
- CAT 1401 - Construction Cost Estimating
- CAT 1741 - Residential Electrical Systems
- CIS 1130 - Network Fundamentals
- CIS 1411 - Introduction to Networks
- EGV 1251 - Introduction to Energy Management Principles
- EGV 1301 - Architectural Energy Analysis
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- HVA 2297 - Special Topics
- HVA 2700 - HVACR Engineering Technology Internship
- HVA 2751 - HVAC-R Operations \& Best Practices


## Horticulture Technician, AAS

Program Code: HTC.S.AAS • Credit Hours: 63

## Description

The Horticulture Technician degree uses courses from existing technical certificates as well as a general education base to fulfill an educational need for horticultural studies within the Miami Valley.

## Career Opportunities

The graduates can hold jobs in greenhouses, nurseries, and landscape businesses.

## Prerequisites

- DEV 0035 and MAT 0200


## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1203 - Trees \& Shrubs
- AGR 1204 - Plant Propagation
- AGR 1205 - Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design
- AGR 1209 - Greenhouse Management Capstone
- AGR 1400 - Agriculture Internship
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Hospitality Management \& Tourism, AAS

Program Code: HMTT.S.AAS • Credit Hours: 64

## Description

The Hospitality Management \& Tourism program prepares students for entry-level positions in restaurants, private clubs, beverage establishments, and general hospitality centers and includes skills in supervision, cost controls, purchasing and human relations. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

The hospitality/tourism industry is a broad category of fields within the service industry that includes lodging, restaurants, event planning, theme parks, transportation, cruise line, and additional fields within the tourism industry. The hospitality industry is a several billion dollar industry that mostly depends on the availability of leisure time and disposable income. It is the number one employer among service industries and is fast becoming the largest single employment category of all industries worldwide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction such as front office managers, restaurant managers, convention services managers, airline attendants, assistant managers, meeting/event planners, car rental agencies, or travel firms.

Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105- Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 1136 - Front Office Operations
- HMT 1137 - Hospitality Industry Computer Systems
- HMT 1139 - Housekeeping Management
- HMT 1143-Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work Experience
- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. Hr(s).
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100 - Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100 - Conversational Spanish I


## Hospitality Management \& Tourism/Bakery \& Pastry Arts, AAS

## Program Code: BPAO.S.AAS • Credit Hours: 65

## Description

The baking/pastry/confection program at Sinclair Community College prepares its graduates for an exciting career as a pastry chef. Skills learned in a commercial-grade bakery kitchen include proper mixing methods, shaping/sculpting techniques, advanced baking, and the science behind it all. Students will be allowed to showcase their
creativity through artisan breads, pastries, chocolate and confection displays, as well as constructing show-stopping wedding cakes. Start today and allow our certified chefs to guide you through graduation and prepare you for an exciting career.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Culinary Arts program is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEF) and by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which both are recognized by the Council on Higher Education Accreditation (CHEA). Please visit acfchefs.org, acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

Students who graduate from the baking/pastry/confectionery concentration will find employment as a baker, pastry cook, pastry chef, pastry department assistant manager, or bake shop manager.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- DIT 1108 - Nutrition for the Culinary Professional
- ENG 1101 - English Composition I
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2118 - Artisan Breads
- HMT 2126-Cake Production \& Cake Decoration
- HMT 2200 - Baking \& Culinary Fundamentals \& Commercial Equipment OR
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2218 - Advanced Pastry Skills
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2293 - Baking \& Pastry Arts Option Cooperative Work Experience
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.
- PSY 1100-General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Hospitality Management \& Tourism/Culinary Arts, AAS

Program Code: CAO.S.AAS • Credit Hours: 65

## Description

The Culinary Arts program provides the basic knowledge a student needs to develop into a certified chef. The serving of good food is important to the reputation of any restaurant. Chefs and cooks are responsible for preparing meals that are pleasing to the eye and taste. Through this specialized program, students develop extensive skills and knowledge of food preparation and presentation. Students also gain an understanding of the duties and responsibilities of a chef and other culinary personnel.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Culinary Arts program is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEF) and by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which both are recognized by the Council on Higher Education Accreditation (CHEA). Please visit acfchefs.org, acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

Students completing the Culinary degree would find employment as a restaurant/banquet cook, short-order cook, fast food cook, private household cook, personal chef, food preparation worker, Sous chef, baker, pastry cook, pastry chef, galley cook, executive chef, executive pastry chef, research chef, corporate chef.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- DIT 1108 - Nutrition for the Culinary Professional
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1125 - Beverage Management
- HMT 1129-Restaurant Desserts
- HMT 2200 - Baking \& Culinary Fundamentals \& Commercial Equipment OR
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2206 - Garde Manger
- HMT 2207 - Butchery \& Fish Management
- HMT 2208 - Advanced Culinary \& Competition Skills OR
- HMT 2209 - Advanced Culinary Skills
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2292 - Culinary Arts Option Cooperative Work Experience
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Hospitality Management \& Tourism/Lodging, AAS

Program Code: HMTTL.S.AAS • Credit Hours: 65

## Description

The Hospitality Management \& Tourism/Lodging program prepares students for positions in hotels/lodging organizations, resorts, and includes skills in supervision and human relations. This degree also encompasses a basic understanding of meeting \& events, and the costing of food since both of these are found at all mid-level and full service properties.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

The hospitality and tourism industry is the number one employer among service industries, and is vastly becoming the largest single employment category of all industries worldwide. In
the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Right now, over half a million jobs in the hospitality industry go unfilled each year, and that number is likely to continue to grow. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction as front office supervisors, front office managers, concierges, owners of bed and breakfasts, leaders in the car rental or travel agencies, tour operations, convention and visitors bureaus, and the airline industry.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1125 - Beverage Management
- HMT 1136 - Front Office Operations
- HMT 1137 - Hospitality Industry Computer Systems
- HMT 1138 - Managing Lodging Operations
- HMT 1139 - Housekeeping Management
- HMT 1141 - Destination Geography
- HMT 1143-Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 1150 - Meeting \& Event Planning
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work Experience
- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100 - Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100 - Conversational Spanish I


## Hospitality Management \& Tourism/Meeting \& Event Planning,

 AAS
## Program Code: HMTTM.S.AAS • Credit Hours: 65

## Description

The Hospitality Management \& Tourism Meeting \& Event Planning program prepares students for entry-level positions in hotels, resorts, convention and visitor centers, corporate centers, private clubs, and meeting and event operations.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

The hospitality/tourism industry is the number one employer among service industries, and is fast becoming the largest single employment category of all industries worldwide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Right now, over half a million jobs in the hospitality industry go unfilled each year, and that number is likely to continue to grow as the food service industry grows. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction as meeting/event planners for corporate events, association/non-profit events, government events, special events and expositions and largescale convention business.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107-Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 1141 - Destination Geography
- HMT 1143-Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 1150 - Meeting \& Event Planning
- HMT 1151 - Special Events, Expositions \& Festivals
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work Experience
- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100 - Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100 - Conversational Spanish I


## Industrial \& Systems Engineering Technology, AAS

Program Code: OPTIO.S.AAS•Credit Hours: 63-64

## Description

The Industrial and Systems Engineering Technology (ISET) program prepares individuals for leadership roles in the operations of business, industry, and service organizations with a special emphasis on ISET skills. Students learn analysis, continuous improvement, quality assurance, and problem-solving techniques that can be applied in financial, health care, manufacturing, and service/retail fields. Students take part in lecture-lab structured courses and hands-on demonstrations of course principles, assuring that they will gain practical knowledge as well as the fundamentals. Those who wish to further their studies may transfer to four-year colleges and universities.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at
studentrecords@sinclair.edu.

## Career Opportunities

Graduates are employed as Industrial and Systems Engineering
Technicians, Quality Control Technicians, Production Supervisors, Continuous Improvement Specialists, and similar positions. Those who wish to further their studies may transfer to four-year colleges and universities.

Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2210 - Methods Engineering
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2250 - New Product Realization
- ISE 2260 - Work Flow \& Facility Design
- ISE 2700 - Industrial \& Systems Engineering Technology Internship OR
- ISE 2780 - Industrial \& Systems Engineering Technology Capstone
- MAN 2110 - Introduction to Project Management
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- PHY 1141 - College Physics I
- Industrial \& Systems Engineering Technology Electives 3 Cr. Hrs.

Industrial \& Systems Engineering Technology Electives

- ISE 1100 - Product Development Fundamentals
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- ISE 1310 - Advanced Metrology \& Gauging
- ISE 1313 - Coordinate Measurement
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- ISE 2240 - Six Sigma: Green Belt
- ISE 2310 - Quality Assurance
- ISE 2360 - Quality Management Systems \& Auditing


## Interior Design, AAS

Program Code: IND.S.AAS Credit Hours: 64

## Description

The program prepares students for careers in the creative, detailoriented field of interior design. Students will develop the knowledge and technical skills necessary to design an interior. Developing floor plans and selecting and coordinating colors, floor and wall coverings are common tasks performed by interior designers. They also place furniture, fixture and cabinetry, and prepare drawings, cost estimates and contracts. Sustainability, building codes, the ADA and basic business practices are included, as well as the development of individual design portfolios.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

Interior design graduates typically pursue careers as designers or consultants in design studios, architecture firms or commercial retailers. Some graduates choose to continue their education in design or a related field at a four-year institution.

## Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods
- CAT 1101 - Architectural Graphics I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2130 - Non-Residential Design
- IND 2135 - Rendering
- IND 2140 - Sustainable Design
- IND 2260 - Interior Design Portfolio
- MRK 2145 - Principles of Retailing OR
- MRK 2225 - Sales Fundamentals
- PSY 1100 - General Psychology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- Interior Design Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Interior Design Electives

- ART 1101-2-D Foundations
- ART 1102 - 3-D Foundations
- ART 1111 - Drawing I
- ART 1141 - Introduction to Ceramics
- ART 1161 - Black \& White Darkroom Photography I
- ART 2230-Art History: Ancient through Medieval Periods
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- CAT 1121 - Architectural Graphics II
- CAT 1141 - Reading Architectural Drawings
- CAT 1201 - Construction Methods \& Materials
- CAT 2741 - Current Topics in Architecture
- IND 2280 - Kitchen \& Bath Design
- VIS 1180 - History \& Theory of Graphic Design
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production
- VIS 2270 - Design Internship


## Internet of Things (IoT) Cyber Technician, AAS

## Program Code: CETT.S.AAS • Credit Hours: 63-64

## Description

The Internet of Things Cyber Technician (IOTCT) program provides students with the skills and education to apply the Internetof- Things (IOT) and programming concepts in the exciting fields of automation, robotics and cyber/network security. The curriculum balances theory and laboratory applications and provides students with a strong background in electronics, programmable logic controllers, robots, robotic programming, networking, and cybersecurity. These in-demand skills prepare graduates for careers in logistics, supply chain, automation, repair/support of existing computer systems, networks, and their associated software which utilize robots and/or automated systems. The IOTCT program provides students a quality education in state-of-the-art laboratories with courses taught by highly qualified faculty who possess industry experience. Those who wish to further their studies are well prepared to pursue a bachelor's degree in Computer Engineering or Electronics and Computer Engineering Technology programs.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Entry level Cyber technician specializing in the IoT consumer market provides students with in-demand skills in electronics, programmable logic controllers, robots, robotic programming, networking, troubleshooting, and cybersecurity. Graduates will be able to work in all areas having to do with the IoT (Internet-of- Things) from programming to engineering hardware installations, medical devices, robotics, supply chain/logistics, and networking/ cybersecurity.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals OR
- CIS 1411 - Introduction to Networks
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2640 - Network Security
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2252-Teach Pendant Robot Programming
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1101 - English Composition I
- MAT 1580 - Precalculus OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I


## Interpreter Education, AAS

## Program Code: ASL.S.AAS • Credit Hours: 65

## Description

The Interpreter Education program provides the unique opportunity for students to develop a solid foundation in language, linguistics, culture and interpretation and to master the skills necessary to successfully function as an interpreter for Deaf, Hard of Hearing, and DeafBlind individuals in a variety of educational and community settings. Students will gain rich insights into the American Deaf community, their beliefs, values, history, rights and cultural norms. A grade of "C" or better is required in all ASL courses.

## Accreditation

This program holds accreditation by the Ohio Department of Education. Graduates are eligible to apply for the Interpreter for the Hearing Impaired Five-Year Associate Licensure.

## Career Opportunities

Employment opportunities are available in areas such as educational, community interpreter referral agencies, business, medical, legal, theatrical, governmental and religious interpreting settings.

## Program Prerequisite(s)

- DEV 0035 - Integrated Developmental Reading \& Writing II


## Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1102 - Interpreting Theory \& Best Practices
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 1228 - Intermediate American Sign Language I
- ASL 1229 - Intermediate American Sign Language II
- ASL 2201 - Interpreting I
- ASL 2202 - Interpreting II
- ASL 2203 - Interpreting III
- ASL 2207 - Role of the Interpreter
- ASL 2212 - Specialized Interpreting I
- ASL 2213 - Specialized Interpreting II
- ASL 2231 - Advanced American Sign Language I
- ASL 2236 - Transliterating \& Signing Modalities
- ASL 2261 - Practicum I
- ASL 2262 - Practicum II
- ASL 2300 - Educational Interpreting
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- PSY 1100 - General Psychology
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Legal Studies, AAS

## Program Code: PAR.S.AAS • Credit Hours: 61

## Description

The Legal Studies program educates students with practical assignments in a simulated law office environment. All student work models the professional, ethical and technology concepts they will use in the legal field. Student learning is supported by experienced paralegals who serve as team teachers. All legal studies students are required to complete an attorney-supervised internship for hands-on experience using their paralegal skills.

Classes are taught in a simulated law office environment that makes current practices and technology available to students. All full-time faculty in the Legal Studies program are licensed attorneys. Legal research is conducted by students both online and in professional law libraries. All students produce a personal portfolio of their legal work and benefit from an internship experience under the supervision of a licensed attorney.

A grade point average of 2.0 is required to enter the Paralegal program. A grade of " C " is required in all PAR courses. An overall grade point average of at least 2.0 is required to continue in the program, and is required for graduation. Students must take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Accreditation

The Legal Studies Program is approved by the American Bar Association, and fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation. All fulltime faculty in the Legal Studies Program are licensed attorneys. Sinclair is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools. Programs of study are approved by the Ohio Board of Regents. Completion of the Legal Studies Program does not authorize a graduate to practice law as an attorney, or to give legal advice.

## Career Opportunities

Graduates may find work in large and small law firms, the business world, courts and government agencies. Under the supervision of a lawyer, a professional paralegal may perform such interesting duties as investigating cases, interviewing clients and witnesses, preparing legal documents and legal research. These responsibilities are carried out in a variety of legal fields, such as criminal law, probate, family law, litigation and real estate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1199 - Textual Editing
- ENG 1201 - English Composition II
- LAW 1101 - Business Law
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PAR Legal Studies Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2401 - Legal Studies Internship
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- RES 1201 - Real Estate Law

Legal Studies Electives

- CJS 1105 - Criminal Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- PAR 2507 - Legal Interviewing Skills
- PAR 2511 - Online Legal Research


## Manufacturing Technology, AAS

Program Code: MFGT.S.AAS • Credit Hours: 60-62

## Description

This program prepares students for a career in Manufacturing by developing an understanding of manufacturing processes and how to implement and improve these processes in the areas of Mechanical and Industrial \& Systems Engineering Technology, Automation, and Advanced Manufacturing. The degree includes traditional classroom instruction and "hands-on" laboratory experience. The first year of study contains an embedded 31-credit hour certificate, Basic Manufacturing. The student may also achieve the Industry Recognized MSSC Certified Production Technician Certificate in the first year. The second year of study will culminate in an AAS degree in one of five certificate pathways. These pathways include General Manufacturing, Advanced Manufacturing, Automation Technology, Mechanical Engineering Technology, Industrial \& Systems Engineering Technology and Digital Thread Technology.

## Career Opportunities

Careers from entry-level to mid-level are possible in these fields General Manufacturing, Advanced Manufacturing, Automation Technology,
Mechanical Engineering Technology, and Industrial \& Systems Engineering Technology.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- COM 2211 - Effective Public Speaking
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering Technology
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective - 3 Cr. Hr.(s)
- Choose one pathway - 14-16 Cr. $\mathrm{Hr}(\mathrm{s})$.

General Manufacturing
Advanced Manufacturing
Automation Technology
Mechanical Engineering Technology
Industrial and Systems Technology
Digital Thread

General Manufacturing

- CAM 1142 - Advanced Shop Floor Math
- CAM 2145 - Shop Floor Programming
- EET 1120 - Introduction to DC \& AC Circuits
- ISE 2240 - Six Sigma: Green Belt
- MET 2151 - Material Science

Advanced Manufacturing

- CAM 1110 - Advanced Machine Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 1214 - Computer Numerical Control Mill Programming OR
- CAM 2204 - Computer Numerical Control Lathe Programming

Automation Technology

- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1144 - Sensors \& Vision Systems

Mechanical Engineering Technology

- MET 1301 - SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431-Additive Manufacturing Post Process
- MET 2151 - Material Science

Industrial and Systems Technology

- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2210 - Methods Engineering
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt
- BIS 1010 - Digital Thread Data Management
- CIS 1010 - Digital Thread Cyber Security
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- MAN 1010 - Digital Thread Enhanced Logistics


## Mechanical Engineering Technology, AAS

## Program Code: MEGT.S.AAS • Credit Hours: 60-62

## Description

The Mechanical Engineering Technology program provides the courses needed to begin a career as a technician in the engineering field. As a mechanical engineering technology graduate, career options are open in a diverse number of fields and companies. Students will complete relevant and practical coursework taught by knowledgeable faculty. The courses are non-calculus based, and electives can tailor the degree to an individual's needs.

## Career Opportunities

Graduates may enter a variety of industries in entry-level positions doing conceptual design, systems engineering, manufacturing, product research and development, or related technical work.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 2101-Thermodynamics
- MET 2151 - Material Science
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2281 - Engineering Technology Professional Practice
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics
- MET 2401 - Machine Design
- MET 2780 - Mechanical Engineering Technology Capstone
- OT36 Social and Behavioral Sciences Elective 3 Cr. Hr(s).
- PHY 1141 - College Physics I
- Mechanical Engineering Technology Elective 6-7 Cr. $\mathbf{H r}(\mathbf{s})$.

Mechanical Engineering Technology Electives

- AUT 1108 - Automotive Engine Systems
- AUT 1116 - Automotive Steering \& Suspension Systems
- AVT 1106-Airframe Safety Systems
- AVT 1113 - Drawings for Aviation
- AVT 2138 - Engine Fuel \& Fuel Metering
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1180 - Welding \& Metal Joining I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1217 - Fluid Power \& Control
- EGV 1101 - Alternate \& Renewable Energy Sources
- EGV 1251 - Introduction to Energy Management Principles
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 2240 - Six Sigma: Green Belt
- MET 1151-Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process
- MET 2700-Mechanical Engineering Technology Internship
- PHY 1142 - College Physics II
- PHY 2210 - MATLAB for Scientists \& Engineers


## Medical Assistant Technology, AAS

## Program Code: MAS.S.AAS • Credit Hours: 60

## Description

Medical assistants are multi-skilled professionals who assist physicians with the administrative and clinical aspects of patient care. The Medical Assistant Technology degree is designed to be completed in four (4) semesters on a full-time basis. The degree consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all degree courses. The student will be required to complete 210 hours of unpaid supervised practicum during their third semester of the program. Note: A Healthcare Professional CPR, Health Certificate, Immunizations, Student Health Insurance, and background check must be completed prior to enrolling in the practicum component of the curriculum. The graduate is eligible to sit for a national exam to become a credentialed medical assistant.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College's Medical Assistant certificate program is accredited the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).
Commission on Accreditation of Allied Health Education Programs, 9355 113th Street N., \#7709, Seminole, FL 33775

## Career Opportunities

Currently Medical Assistant Technology is one of the fastest growing occupations in the United States. Options for individuals seeking medical services and treatment: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMOs), multi-physician group practices and medical specialty clinics have opened new career opportunities.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1107 - Core Concepts of Public Health
- ALH 1140 - Fundamentals of Disease Processes
- ALH 2201 - Survey of Drug Therapy
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1102 - Clinical Medical Assisting I
- MAS 1103-Clinical Medical Assisting II
- MAS 1110-Administrative Medical Assisting
- MAS 1130-Reimbursement Specialist Practicum
- MAS 1192 - Lab for MAS 1102
- MAS 1193 - Lab for MAS 1103
- MAS 2201 - Clinical Medical Assisting III
- MAS 2210 - Medical Billing Specialist
- MAS 2220 - MAS Practicum
- MAS 2291 - Lab for MAS 2201
- MAS Medical Assistant Technology Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $3 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology

Medical Assistant Technology Electives

- ACC 1210 - Introduction to Financial Accounting
- BIO 2205 - Microbiology
- BIS 1120 - Introduction to Software Applications
- BIS 1221 - Specialized Computer Applications for Health Information Management
- CIS 1107 - Introduction to Operating Systems
- CIS 1160 - Introduction to Data Literacy
- COM 2235 - Principles of Interviewing
- COM 2285-Organizational Communication
- DIT 1108 - Nutrition for the Culinary Professional
- DIT 1525 - Human Nutrition
- ECO 1100 - Introduction to Economics
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory
- HIM 2262 - Advanced Medical Office Coding
- LAW 1101 - Business Law
- MAN 2110 - Introduction to Project Management
- MHT 1101 - Introduction to Mental Health Services
- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2200 - Lifespan Human Development
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2228 - Industrial Organizational Psychology
- SOC 1108 - Appalachian Families
- SOC 1160 - Sociology of Aging
- SOC 2215 - Race \& Ethnicity
- SWK 1206 - Introduction to Social Work


## Medical Laboratory Technology, AAS

## Program Code: CLT.S.AAS • Credit Hours: 60-64

## Description

The associate degree program in Medical Laboratory Technology prepares students to enter the workforce as Laboratory Technicians. In this profession, graduates are responsible for performing routine clinical laboratory tests as the primary analysis, making specimen oriented decisions on predetermined criteria, including a working knowledge of critical values. As part of the program, the students will complete a non-paid, supervised health-related practicum in a hospital lab setting.

This degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage.

Students will have a maximum of three opportunities to successfully complete BIO 1121, ALH 1101, and all general education courses required by the program. All course withdrawals (W) or failures (D) or (F) will countas an attempt. After a third unsuccessful
attempt, the student is no longer eligible to enter or continue in the program.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Sinclair Community College's Clinical Laboratory Technology associate degree program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 66018; P:773.714.8880; naaclsinfor@naacls.org

## Career Opportunities

Laboratory Technicians perform highly technical diagnostic tests in medical or scientific laboratories. Lab technicians might collect samples, study and perform tests on body fluids, chemical compounds and biological specimens. Lab techs use various types of lab equipment and complex computer programs to perform their tests.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I OR
- BIO 1121 - Human Anatomy \& Physiology I AND
- Approval of Department AND
- 2.7 cumulative grade point average or greater is required for admission to the program and to begin technical studies AND
- Completion of Test of Essential Academic Skills (TEAS) required AND
- Students have a maximum of three opportunities to successfully complete BIO and MAT courses. Students may withdraw or fail, but must successfully complete the course on or before the third attempt. Students are ineligible for admission to the Clinical Laboratory Technology Program after a third unsuccessful course attempt.


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2220 - Pathophysiology
- BIO 1171 - Principles of Biology I
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II OR
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I AND
- CHE 1251-Lab for General Chemistry I OR
- CHE 1121 - Introduction to Chemistry II AND
- CHE 1161 - Lab for Introduction to Chemistry II OR
- CHE 1221 - General Chemistry II AND
- CHE 1261 - Lab for General Chemistry II OR
- CLT 1200 - Introduction to Clinical Laboratory
- CLT 1203 - Lab for Introduction to Clinical Laboratory
- CLT 2110 - Urine \& Body Fluid Analysis/Immunology/Serology
- CLT 2113 - Lab for Urine \& Body Fluid Analysis/Immunology/Serology
- CLT 2210 - Hematology
- CLT 2213 - Lab for Hematology
- CLT 2310 - Clinical Chemistry
- CLT 2313 - Lab for Clinical Chemistry
- CLT 2410 - Clinical Microbiology/Parasitology
- CLT 2413 - Lab for Clinical Microbiology/Parasitology
- CLT 2510 - Immunohematology
- CLT 2513 - Lab for Immunohematology
- CLT 2810 - CLT Practicum
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1450 - Introductory Statistics
- PSY 1100 - General Psychology


## Mental Health Services, AAS

## Program Code: MHT.S.AAS • Credit Hours: 65

## Description

The Mental Health Services degree prepares entry-level mental health professionals as members of an inter-disciplinary team under clinical supervision. Duties may include client interviewing, crisis intervention, advocacy, group facilitation and case management. The Mental Health Services degree can be completed on a full-time or part-time basis. If enrolled full-time, it is designed to be completed in five (5) semesters. This degree consists of open enrollment courses (general education and division specific) and program specific courses restricted to majors. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry in to limited enrollment MHT courses, students must have a 2.0 cumulative GPA, a grade of C or higher in all program courses and complete MHAS Online Orientation and an initial faculty advising appointment while enrolled in MHT 1101 Introduction to Mental Health Services. The practicum portion of the curriculum provides 420 hours of supervised clinical experience.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Graduates can work as mental health technicians, chemical dependency counselor assistants, social work assistants, case managers and several other jobs in hospitals or or mental health treatment settings.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1111 - General Biology I
- ENG 1101 - English Composition I
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 1201 - Interviewing Skills
- MHT 1202 - Motivational Interviewing
- MHT 1203 - Professional Documentation
- MHT 2105 - Mental Health Treatment Methods
- MHT 2111 - Group Dynamics I
- MHT 2121 - Practicum I
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2211 - Group Dynamics II
- MHT 2222 - Practicum II
- MHT 2245-Mental Health \& the Family
- MHT 2250 - Child \& Adolescent Mental Health
- PSY 1100 - General Psychology
- PSY 1160 - Black Psychology
- PSY 2217 - Abnormal Psychology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$


## Nursing, AAS

## Program Code: NUR.S.AAS • Credit Hours: 65

## Description

The Nursing program prepares students to meet the health needs of a diverse population in a variety of dynamic community environments. The curriculum is divided among nursing theory, nursing clinical practice, general education, and the sciences, where students participate in classroom, laboratory, and clinical experiences. Graduates of the program are eligible to take the NCLEX-RN for licensure.

The Nursing program is designed to be completed in five (5) semesters on a full-time basis. The curriculum may be taken on a part-time basis, but the nursing courses must be taken in sequence. This degree program consists of open enrollment courses (general education and division-specific) and program-specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. Details on eligibility for the limited enrollment courses can be found online in the Nursing Student Handbook.

Sinclair offers advance placement into the nursing program for qualified Licensed Practical Nurses (LPNs) or equivalent military experience and transfer students. After successful completion of the transition courses (NSG 1700 and NSG 1750), students will receive articulated credit for ALH 1101, NSG 1400, NSG 1450, NSG 1600,
and NSG 1650. Additionally, NSG 1200 and the science elective will be waived. Those students will continue to NSG 2400/2450. Students transferring from other nursing programs must meet the criteria outlined in the online Nursing Student Handbook.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether the student may enroll.

## Accreditation

The Associate Degree Nursing (ADN) program is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN), 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326, (404) 9755000 , and approved by the State of Ohio Board of Nursing.

## Career Opportunities

Registered nurses have a variety of employment opportunities.
Workplace settings may include hospitals, extended care and long-term care facilities, rehabilitation programs, physicians' offices, home health agencies and various types of clinics and outpatient services.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective AND
- NSG 1200 - Introduction to Nursing AND
- High School Diploma or equivalency AND
- GPA 2.5 or greater AND
- Proficiency on all four areas of the Test of Essential Academic Skills (TEAS) exam AND
- Nurse Aide training course or equivalent work experience AND
- Restricted to Majors


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2202 - General Pharmacology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology OR
- CHE 1111 - Introduction to Chemistry I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.
- NSG 1200 - Introduction to Nursing
- NSG 1400 - Health \& Illness I: Foundational Concepts in Nursing
- NSG 1450 - Professional Nursing I: Introduction to the Role of the Professional Nurse
- NSG 1600 - Health \& Illness II: Health \& Wellness Concepts
- NSG 1650 - Professional Nursing II: Healthcare System Concepts
- NSG 2400 - Health \& Illness III: Health \& Wellness Concepts
- NSG 2450 - Professional Nursing III: Leadership \& Management of Care
- NSG 2600 - Concept Synthesis
- PSY 1100 - General Psychology


## Nutrition and Dietetics Technician, AAS

## Program Code: DIT.S.AAS • Credit Hours: 60-61

## Description

Graduates of the Nutrition and Dietetics Technician (DIT) program are trained food and nutrition practitioners that work under the supervision of a registered dietitian nutritionist (RDN). As an integral member of the health care and food service management teams, they influence food choices and lifestyles to promote optimal health. The program consists of five major domains that include clinical, community, education, management and foodservice systems. It is designed to be completed in five (5) consecutive semesters on a full-time basis. Some students elect to attend on a part-time basis, extending the length of study to three academic years. The curriculum consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The limited enrollment coursework includes 630 hours of unpaid directed practice experiences at area community, food service and health care facilities. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the program webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all program courses. Students of Sinclair's Nutrition and Dietetics Program are eligible to become members of the Academy of Nutrition and Dietetics (AND), a nationally recognized organization located at 120 South Riverside Plaza, Suite 2190, Chicago Illinois 60606, 1-800-877-1600, www.eatright.org. This specially designed program enables students to enjoy benefits of student AND membership while attending school. Graduates are eligible for active AND membership. Benefits include networking, professional growth, educational enrichment, and developing leadership skills. The graduate is eligible to take the National Credentialing Exam to become a Nutrition and Dietetics Technician, Registered (NDTR).

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Dietetic Technician program is fully accredited by the Accreditation Council on Education for Nutrition and Dietetics (ACEND) of the Academy on Nutrition and Dietetics (AND). It is also approved by the Association of Nutrition and Food Professionals (ANFP).

## Career Opportunities

Nutrition and Dietetic technicians, registered (NDTRs) work independently or in teams with registered dietitian nutritionists (RDNs) in a variety of employment settings, including health care (hospitals, nursing homes, retirement centers, home health care programs), foodservice (schools, day-care centers, correctional facilities, restaurants, health care facilities, corporations and hospitals), community/public health (public health agencies, health clubs, weight management clinics and community wellness centers) and business and industry (food companies, food vending and distributing operations).

## Program Prerequisite(s)

- MAT 0100 - Algebra I AND
- DEV 0035 - Integrated Developmental Reading \& Writing II AND
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession AND
- DIT 1525 - Human Nutrition

Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- BIO 1108 - Lab for Human Biology
- COM 2206 - Interpersonal Communication
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 1210 - Medical Terminology for Dietetics
- DIT 1525 - Human Nutrition
- DIT 1630 - Nutrition Through the Lifecycle
- DIT 1635-Community Nutrition
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2240 - Motivational Interviewing, Nutrition Counseling \& Communication
- DIT 2305 - Food, Culture \& Cuisine
- DIT 2310 - Lab for Food, Culture \& Cuisine
- DIT 2505 - Food Science \& Production Lab I
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2625 - Medical Nutrition Therapy I
- DIT 2630 - Medical Nutrition Therapy Clinical I
- DIT 2735 - Foodservice Retail Business Management \& Mid-Program Assessment
- DIT 2740 - Retail Business Management Directed Practicum
- DIT 2845 - Medical Nutrition Therapy II
- DIT 2850 - Medical Nutrition Therapy Clinical II
- DIT 2855 - Nutrition \& Dietetics Program Assessment Capstone
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics
- PSY 1100-General Psychology


## Occupational Therapy Assistant, AAS

## Program Code: OTA.S.AAS • Credit Hours: 65

## Description

Occupational therapy assistants (OTAs), under the supervision of occupational therapists, provide services to individuals whose abilities to cope with daily tasks are threatened or impaired by developmental deficits, aging, injury or illness. OTAs help people prevent, lessen, or overcome physical, cognitive and/or psychosocial dysfunction so that they are able to function with maximum independence. The program includes extensive clinical training that must be finished within 12 months of completion of the academic course work. A grade of "C" or higher ( $77 \%$ ) is required in all program courses to remain in the program.

The Occupational Therapy Assistant program is designed to be completed in five (5) semesters on a full-time basis, when the student begins the technical portion of the program. This degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses (OTA specific courses). To qualify for entry to limited enrollment courses, please see the OTA Program Specific Applicant Information Packet (PDF) located on the webpage (http://www.sinclair.edu/program/params/programCode/OTA-SAAS/).

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at ACOTE c/o AOTA, 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. AOTA's telephone number is (301)6522682. www.acoteonline.org/ The program received a 10 -year reaccreditation term in 2021-2022. It is scheduled to be reaccredited in 2031-2032.

## Career Opportunities

Occupational therapy is a health care field in which the demand for personnel continues to increase. There are not enough qualified personnel to fill the demand. According to the Bureau of Labor Statistics (bls.gov) the Job Outlook is $40 \%$ (much faster than average job growth 2014-2024). Occupational therapy assistants work in hospitals, clinics, schools, nursing facilities, group homes, home health agencies and rehabilitation centers.

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- OTA 1111 - Introduction to Occupational Therapy Assistant AND
- Completion of Test of Essential Academic Skills (TEAS) Exam AND
- Minimum cumulative GPA of 2.5


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes OR
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OTA 1111 - Introduction to Occupational Therapy Assistant
- OTA 1211 - Occupational Therapy Assistant Foundations I
- OTA 1212 - Functional Anatomy
- OTA 1213 - Occupational Therapy \& Adults with Physical Dysfunction
- OTA 1214 - Occupational Therapy \& Adults with Physical Dysfunction Lab
- OTA 1311 - Occupational Therapy Assistant Foundations II
- OTA 1312 - Occupational Therapy \& Human Development
- OTA 1313 - Occupational Therapy \& Adults with Neurological Dysfunction
- OTA 1314 - Occupational Therapy \& Neurological Dysfunction Lab
- OTA 1315 - Therapeutic Use of Self
- OTA 2412 - Occupational Therapy Assistant \& Pediatrics
- OTA 2413 - Occupational Therapy Assistant \& Pediatrics Lab
- OTA 2414 - Occupational Therapy Assistant \& Psychosocial Dysfunction
- OTA 2415- Occupational Therapy Assistant \& Psychosocial Dysfunction Lab
- OTA 2416- Occupational Therapy Assistant Level 1 Fieldwork
- OTA 2511 - Occupational Therapy Assistant Level 2 Fieldwork A
- OTA 2512 - Occupational Therapy Assistant Level 2

Fieldwork B

- OTA 2523 - Occupational Therapy Assistant Clinical Issues A
- OTA 2524 - Occupational Therapy Assistant Clinical Issues B
- PSY 1100 - General Psychology
- SOC 2215 - Race \& Ethnicity


## Physical Therapist Assistant, AAS

## Program Code: PTA.S.AAS • Credit Hours: 65

## Description

The Physical Therapist Assistant (PTA) program prepares students to provide physical therapy services under the direction and supervision of a physical therapist. The curriculum is divided among general education and technical courses, and includes classroom, laboratory, and clinical education experiences. Upon completion of the PTA program curriculum, the student is awarded the Associate of Applied Science (AAS) degree. Graduates of the program are eligible to take the National Physical Therapy Examination for Physical Therapist Assistants (NPTE-PTA) for licensure.

The PTA program is designed to be completed in five (5) semesters on a full-time basis. The degree program consists of open enrollment courses (prerequisites and general education) and program specific technical courses with limited enrollment. The open enrollment courses may be taken prior to entry into the program technical courses. The PTA program enrolls students through two different pathways, a general admissions pathway and an Accelerated Admission for Academic Achievement (AAAA). Details on admissions eligibility and processes can be found online in the PTA Program Information Packet.

The mission of the PTA program is to provide high quality education to students seeking the opportunity to practice as a physical therapist assistant under the direction and supervision of a physical therapist.

## Accreditation

The Physical Therapist Assistant Program at Sinclair Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program/institution directly, please call 937-5125355 or email ptaprogram@sinclair.edu.

## Career Opportunities

Graduates, once licensed by the State of Ohio, work either full- or parttime under the supervision of a physical therapist in a variety of practice environments, such as outpatient clinics, rehabilitation units in hospitals or nursing homes, assisted living, home health or schoolbased programs.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR OT36 Mathematics Elective AND
- PHY 1106 - Physics for Technology AND
- PHY 1107- Lab for Physics for Technology AND
- PTA 1000 - Introduction to Physical Therapy AND
- The student must be at least 18 years of age by initiation of PTA technical courses AND
- The student must meet minimum requirements as identified in the PTA Program Information Packet.


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes OR
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PHY 1106 - Physics for Technology
- PHY 1107 - Lab for Physics for Technology
- PSY 1100 - General Psychology
- PTA 1000 - Introduction to Physical Therapy
- PTA 1100 - Professional Issues
- PTA 1155 - Functional Anatomy
- PTA 1165 - Manual Therapy
- PTA 1215 - Functional Mobility
- PTA 1300 - Pathophysiology for the PTA
- PTA 1325 - Neuropathophysiology
- PTA 1350-Therapeutic Exercise
- PTA 1375 - Professional Issues II
- PTA 2305 - Neuromuscular Rehabilitation
- PTA 2315 - The Medically Complex Patient
- PTA 2330 - Seminar for Clinical Practicum I
- PTA 2335-Clinical Practicum I
- PTA 2355 - Physical Agents
- PTA 2365 - Orthopedics
- PTA 2430 - Seminar for Clinical Practicum II
- PTA 2435 - Clinical Practicum II

Public Health, AAS

Program Code: PH.S.AAS • Credit Hours: 66-64

## Description

The associate of applied science degree in Public Health provides students with the introductory foundations for a future career in public health. Graduates of the program will be equipped with the population health skills to address the world's most pressing health issues. The program is also designed to promote transferability to the bachelor's degree completion programs in the health field.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether the student may enroll.

## Career Opportunities

Career opportunities include: Health Educator; Health Promotion Program Coordinator; Public Health Study Coordinator; Injury Prevention Specialist; Healthcare Navigator; Community Health Worker; Community Activist; Disease Prevention Activist; Homeless Services Educator; Consumer Advocate.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1105 - Overview of Holistic Health
- ALH 1107 - Core Concepts of Public Health
- ALH 1127 - Public Health Program Planning \& Intervention
- ALH 1140 - Fundamentals of Disease Processes
- ALH 1250 - Health Science Practicum
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- MAS 1102 - Clinical Medical Assisting I OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe OR
- ALH 1120 - Nurse Aide Training
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 1214 - Personal \& Community Health Behavior
- ENS 2420 - Concepts of Lifestyle Coaching
- HIM 1101-Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- MHT 1101 - Introduction to Mental Health Services
- MHT 1202 - Motivational Interviewing
- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- PSY 2126 - Stress Management
- PSY 2200 - Lifespan Human Development
- SOC 1101 - Introduction to Sociology

As a specialized discipline within the radiologic science profession, radiographers perform medical imaging procedures to aid the physician in the diagnosis and treatment of injury and disease. Graduates will be eligible to apply for the national credentialing examination offered by the American Registry of Radiologic Technologists (ARRT).
Successful completion of the ARRT credentialing examination simultaneously satisfies the Ohio Department of Health (ODH) Radiologic Licensure Program requirements.

The Radiologic Technology program is designed to be completed in five (5) semesters on a full-time basis when the student begins the technical portion of the program. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. Completion of prerequisites and a cumulative GPA of 2.8 is required, as well as a grade of " C " or higher is required in all program courses.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), located at 20 N. Wacker Drive, Suite 2850, Chicago, IL. 60606-3182. 312-7045300 mail@jrcert.org or www.jrcert.org

## Career Opportunities

A career in Radiologic Technology can lead in many directions. Graduates may find employment in comprehensive hospitals, suburban or rural outpatient centers or physician offices. Completion of this associate degree program can also lead to additional educational opportunities such as higher degree programs in management, education, etc. and advanced imaging programs designed to prepare radiographers for specialization in imaging modalities such as Computed Tomography (CT), Magnetic Resonance Imaging (MRI), etc.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1107 - Human Biology AND
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology AND
- MAT 1470 - College Algebra AND
- RAT 1101 - Introduction to Radiologic Technology
- AND Approval of Department


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101-Medical Terminology
- MAT 1470 - College Algebra
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- RAT 1101 - Introduction to Radiologic Technology
- RAT 1111 - Clinical Practicum I
- RAT 1121 - Radiographic Procedures I
- RAT 1131 - Patient Care in Radiologic Technology
- RAT 1212 - Clinical Practicum II
- RAT 1222 - Radiographic Procedures II
- RAT 1241 - Radiologic Sciences I
- RAT 2413 - Clinical Practicum III
- RAT 2415 - Radiographic Pathology
- RAT 2423 - Radiographic Procedures III
- RAT 2429 - Lab for Radiographic Procedures III
- RAT 2442 - Radiologic Sciences II
- RAT 2514 - Clinical Practicum IV
- RAT 2526 - Capstone in Radiologic Technology
- RAT 2543 - Radiologic Sciences III


## Real Estate, AAS

## Program Code: RES.S.AAS • Credit Hours: 61-62

## Description

In the Real Estate degree program, students acquire a variety of skills in selling, marketing, leasing, buying, appraising, investing in and managing real property. Courses are offered which are required by the Ohio Division of Real Estate for persons taking the real estate sales examination.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities include but are not limited to careers in property management, investing, appraising, abstracting, and real estate sales.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- FIN 2450 - Personal Finance
- LAW 1101 - Business Law
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- PLS 1232 - State \& Local Government
- RES Real Estate Elective 5-6 Cr. $\mathbf{H r}(\mathbf{s})$.
- RES 1101 - Real Estate Principles
- RES 1102 - Real Estate Abstracting
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal
- RES 1302 - Real Estate Investment: Analysis \& Financing
- RES 1402 - Property Management
- RES 2170 - Real Estate Internship
- SOC 1101 - Introduction to Sociology

Real Estate Electives

- ACC 1220 - Introduction to Managerial Accounting
- CAT 1161 - Introduction to the Built Environment
- ENT 2140 - Small Business Finance
- MAN 2140 - Human Resource Management
- MRK 2135 - Digital Marketing
- MRK 2225 - Sales Fundamentals


## Respiratory Care, AAS

## Program Code: RET.S.AAS • Credit Hours: 65

## Description

Respiratory care practitioners are responsible for the prevention, treatment, management and rehabilitation of patients of all ages with deficiencies or abnormalities associated with the cardiopulmonary system. The Respiratory Care program is designed to be completed in five (5) semesters (excluding prerequisites), on a full-time basis. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A cumulative GPA of 2.5 is required and an overall grade point average of at least 2.0 is necessary for continuance in the program and graduation.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The program is fully accredited by the Commission on Accreditation for Respiratory Care (CoARC), www.coarc.com. For further information regarding the Sinclair College respiratory care program outcomes data, please visit the CoARC website. Upon completion of the program the graduate is eligible for the national credentialing examinations provided by the National Board for Respiratory Care (NBRC). Graduates will also be eligible for a license to practice in the State of Ohio via the State Medical Board of Ohio. In addition, graduates meet the requirements for licensure in other states.

## Career Opportunities

Respiratory Care is a growing profession with opportunities for graduates to work with newborn, children, adult and geriatric patients in hospitals/acute care setting, long-term facilities, home care/durable medical equipment companies and physician offices.

## Program Prerequisite(s)

- BIO 1107 - Human Biology AND
- CHE 1111 - Introduction to Chemistry I AND
- HIM 1101 - Medical Terminology AND
- RET 1100 - Introduction to Respiratory Care AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- CHE 1111 - Introduction to Chemistry I
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- RET 1100 - Introduction to Respiratory Care
- RET 1101 - Respiratory Care Fundamentals I
- RET 1102 - Lab for Respiratory Care Fundamentals I
- RET 1124 - Cardiopulmonary Pharmacology I
- RET 1125 - Respiratory Care Sciences
- RET 1201 - Respiratory Care Fundamentals II
- RET 1202 - Lab for Respiratory Care Fundamentals II
- RET 1203 - Respiratory Care Clinic I
- RET 1205 - Cardiopulmonary Disease Processes
- RET 1301 - Respiratory Care Fundamentals III
- RET 1303 - Respiratory Care Clinic II
- RET 2101 - Critical Care I
- RET 2102 - Lab for Critical Care I
- RET 2103 - Respiratory Care Clinic III
- RET 2124 - Cardiopulmonary Pharmacology II
- RET 2201 - Critical Care II
- RET 2202 - Lab for Critical Care II
- RET 2203 - Respiratory Care Clinic IV
- RET 2204 - Respiratory Care Clinic V
- RET 2220 - Respiratory Care Emergency Preparedness
- RET 2222 - Lab for Respiratory Care Emergency Preparedness
- RET 2250 - Pediatrics \& Neonatology


## Surgical Technology, AAS

## Program Code: SUT.S.AAS • Credit Hours: 60

## Description

The Surgical Technology program at Sinclair Community College has been CAAHEP approved since 1998 and offers the opportunity to prepare for a career as a member of a surgical team.

A surgical technologist works together with the surgeon, registered nurse, and anesthesiologist as a member of the surgical team. To ensure proper surgical case management, the surgical technologist prepares and passes all sterile instruments during the surgical procedure while maintaining the sterile field and anticipating the needs of the surgeon.

The surgical technologist helps to meet the needs of patients in the operating rooms of hospitals, ambulatory surgery centers, physician offices, diagnostic facilities and other agencies where surgery is performed.

The Surgical Technology program is designed to be completed in five (5) semesters on a full-time basis. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. A cumulative GPA of 2.5 is required, as well as a grade of " C " or higher in all program courses.

The program includes both didactic instruction and supervised clinical practice in all areas required by the ARC/STSA (in collaboration with CAAHEP). Supervised clinical practice in area operating rooms include participating in procedures in general surgery, obstetrics and gynecology, ophthalmology, otorhinolaryngology, plastic surgery, urology, orthopedics, neurosurgery, thoracic surgery, cardiovascular, and peripheral vascular surgery.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Accredited by CAAHEP (Commission on Accreditation of Allied Health Education Programs), Sinclair's Surgical Technology program provides students with the opportunity to work as a Certified Surgical Technologists. In this program, students will be required to complete the academic classroom requirements, but will also have the
opportunity to gain valuable supervised clinical practice. As part of the curriculum, the students will rotate through the clinical affiliates as scheduled in the course sequence. The standard surgical rotation case requirements that students must achieve is 120 cases, following the Core Curriculum for Surgical Technology, 6e (CCST6e). Students are required to complete a minimum of thirty (30) cases in General Surgery, twenty (20) of which should be in the First Scrub Role. In addition, students are required to complete a minimum of ninety (90) cases in various surgical specialties. Sixty (60) of those cases should be in the first scrub role and evenly, but not necessarily equally distributed between a minimum of four (4) surgical specialties.

## Career Opportunities

A Surgical Technologist helps to meet the surgical needs of patients in the operating rooms in a variety of different environments. Employment may be found in hospital operating rooms, same day surgery centers, labor and delivery units, endoscopy units, and many other settings where invasive therapeutic or diagnostic surgical procedures are performed. Surgical Technologists may also be employed privately by a surgeon or by surgeon group practices that have specialized teams.

Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- HIM 1101 - Medical Terminology AND
- MAT 1130 - Mathematics in Health Sciences AND
- Restricted to Majors

Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2201 - Survey of Drug Therapy
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIO 2205 - Microbiology
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences
- PSY 1100 - General Psychology
- SUT 1110 - Theory \& Fundamentals
- SUT 1117 - Laboratory for Theory \& Fundamentals
- SUT 1120 - The Surgical Process
- SUT 1127 - Lab for the Surgical Process
- SUT 2110 - Surgical Procedures I
- SUT 2117 - Directed Practice for Surgical Procedures I
- SUT 2120 - Surgical Procedures II
- SUT 2127 - Directed Practice for Surgical Procedures II
- SUT 2200 - Surgical Procedures III
- SUT 2207 - Directed Practice for Surgical Procedures III
- SUT 2300 - Surgical Technology Review


## Unmanned Aerial Systems, AAS

## Program Code: UAS.S.AAS • Credit Hours: 60-64

## Description

The Unmanned Aerial Systems (UAS) degree program prepares students for entry level positions in the UAS industry by providing foundational knowledge and skills in UAS mission planning, applications, maintenance, laws and regulations, and data analytics, and project management using UAS platforms. Program content includes an introduction to UAS flight, history, avionics, sensors, communications systems and selectable paths including Data Analysis and applications such as First Responders, Geographic Information Systems, Precision Agriculture, and Entrepreneurship. Students will prepare for and conduct unmanned flights similar to those commonly performed in the industry observing Federal Aviation Administrations (FAA) regulations that govern UAS operations.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

The Sinclair Unmanned Aerial Systems Associate of Applied Science degree will produce graduates who will serve the immediate Dayton area, broader region, and nationally. Graduates of the associate degree program from Sinclair Community College will contribute to filling the current and growing need within the state of Ohio and nation for unmanned aerial systems related applications such as Geographic Information, Data Analytics, First Responders and Precision Agriculture.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1246 - Air Traffic Control Communications
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- AVT 2240 - Human Factors in Aviation
- AVT 2279 - Unmanned Aerial Systems Project
- AVT 2280 - Introduction to UAS Maintenance
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EET 2221 - UAS Sensors \& Systems
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580-Precalculus
- MET 1131 - Personal Computer Applications for Engineering Technology
- PHY 1141 - College Physics I
- Data Analytics Pathway OR
- First Responders Pathway OR
- Geographic Information Pathway OR
- Precision Agriculture Pathway OR
- Entrepreneurship Pathway 9-11 Cr. $\mathbf{H r}(\mathbf{s})$.
- AVT 2700 - Aviation Internship OR
- AVT UAS Elective 1-2 Cr. $\mathbf{H r}(\mathbf{s})$.

Data Analytics Pathway

- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis
- AVT 1123 - Acoustic \& CBRNE Data Analysis
- GEO 1107 - Introduction to Geographic Information Systems (GIS)

Entrepreneurship Pathway

- AVT 1115 - Introduction to UAS Entrepreneurship
- AVT 2115 - UAS Entrepreneurship Capstone
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business

First Responders Pathway

- AVT 1108 - UAS First Responder Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1155 - Homeland Security Issues \& Administration
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory

Geographic Information Pathway

- AVT 1114 - Geospatial Information for UAS
- CAT 1501 - Fundamentals of Surveying \& Mapping
- GEO 1107 - Introduction to Geographic Information Systems (GIS)

Precision Agriculture Pathway

- AVT 1112 - UAS Precision Agriculture
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200 - Agricultural Economics AND
- AGR 1300 - Agronomy

Program Code: VET.S.AAS • Credit Hours: 65

## Description

The Veterinary Technology Program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. Most open enrollment courses must be taken prior to entry into the limited enrollment courses. To be considered for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A graduate from this program will be eligible to sit for the Veterinary Technician National Exam (VTNE.) Those graduates who pass this exam with a score of $75 \%$ or better will be eligible to register with the Ohio Veterinary Medical Licensing Board in order to practice within the State of Ohio.

NOTE: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Sinclair College Veterinary Technology Program is fully accredited by the American Veterinary Medical Association Committee on Veterinary Technician Education and Activities (AVMA CVTEA), effective March 28, 2019.

## Career Opportunities

The Associate of Applied Science degree in Veterinary Technology is designed to train Veterinary Technicians to assist Veterinarians in animal hospitals, laboratory research centers, referral centers, zoos, etc. A registered veterinary technician (RVT) is responsible for assisting the veterinarian in a general practice and performing essential animal care tasks. His or her job duties may include, but are not limited to: performing dental cleanings and radiologic procedures; surgical and anesthetic assistance; diagnostic laboratory techniques; IV catheter placement; patient monitoring; inventory control; and office staff management. In addition, this degree can be a stepping-stone to a 4year degree at another institution, and eventually to Veterinary School (an additional 4-year program). This program provides training in animal husbandry and restraint, nursing, surgical preparation and techniques, drug administration, anesthesia, anatomy, laboratory techniques, and radiography. Preceptorships at various private practices and research institutions provide valuable on-the-job training. The veterinarians of the Miami Valley anticipate a need of nearly 60 registered veterinary technicians for hire annually for at least the next 5 years. This program is unique in that it places students within veterinary hospitals very early in the course of study, allowing students and hospitals alike to determine what the "best fit" will be for them within the hospital environment. Nearly all students are offered one or more jobs prior to the completion of the program.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II AND
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I AND
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences AND
- VET 1102 - Introduction to Veterinary Technology I AND
- VET 1202 - Introduction to Veterinary Technology II AND
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism AND
- Approval of Department


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1103 - Test Taking Strategies
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology
- BIO 2206 - Lab for Microbiology
- CHE 1111 - Introduction to Chemistry I
- CHE 1151 - Lab for Introduction to Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- VET 1102 - Introduction to Veterinary Technology I
- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2005 - Clinical Practice II: Medical Terminology \& Ethics
- VET 2106 - Comparative Anatomy \& Physiology
- VET 2104 - Animal Husbandry \& Disease
- VET 2107 - Technical Practicum I OR
- VET 2108 - Veterinary Assistant Technical Practicum
- VET 2110 - Veterinary Parasitology
- VET 2111 - Large Animal Husbandry \& Veterinary Techniques
- VET 2113 - Laboratory for Comparative Anatomy \& Physiology
- VET 2115 - Veterinary Anesthesia \& Surgical Skills
- VET 2117 - Laboratory for Veterinary Anesthesia \& Surgical Skills
- VET 2205 - Veterinary Dentistry, Advanced Radiology \& Diagnostic Laboratory
- VET 2207 - Technical Practicum II
- VET 2211 - Veterinary Case Studies
- VET 2250 - Veterinary Pharmacology
- VET 2300 - Preceptorship


## Visual Communications, AAS

## Program Code: VIS.S.AAS • Credit Hours: 64-65

## Description

The program prepares students for careers in visual communication which is creative, fast paced and in demand by most businesses. Students will develop the knowledge and technical skills necessary to create both printed and digital design work. This includes the design of stationery, brochures, magazines, advertising, packaging, signage, web pages, interactive media and other pieces. Creativity, problem solving and the design process are stressed. Advanced computer skills, portfolio development and job-seeking strategies are also incorporated into the curriculum.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

Visual Communications graduates typically pursue careers as graphic designers (print) or digital designers (interactive/web) in design studios, advertising agencies, web firms, magazine and book publishing companies, printing companies or corporate design departments. Some graduates choose to continue their education in design or a related field at a four-year institution.

Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 1161 - Black \& White Darkroom Photography I OR
- ART 2265 - Digital Color Photography I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1150 - Design Processes II
- VIS 1180 - History \& Theory of Graphic Design
- VIS 1210 - Design Drawing
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production
- VIS 2110 - Design Principles
- VIS 2120 - Design Applications I
- VIS 2160 - Design Applications II
- VIS 2260 - Design Portfolio
- Visual Communications Elective 3-4 Cr. $\mathbf{H r}(\mathbf{s})$.

Visual Communications Electives

- ART 1101-2-D Foundations
- ART 1102-3-D Foundations
- ART 1111 - Drawing I
- ART 1141 - Introduction to Ceramics
- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- CIS 1350 - Web Site Development with HTML \& CSS
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1240 - Color Theory
- IND 2135 - Rendering
- MAN 1107 - Foundations of Business
- MRK 2100 - Foundations of Marketing
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2220 - Small Business Marketing
- MRK 2225 - Sales Fundamentals
- VIS 1320 - User Experience/User Interface
- VIS 1420 - Video Production
- VIS 2270 - Design Internship


## Certificate

## Advanced Precision Machining, CRT

## Program Code: CAMAPM.S.CRT•Credit Hours: 30

## Description

This program provides any student whether working full time, raising a family, or going to college, the ability to pursue the exciting and indemand career of precision machining. Recent events have shown that these careers are essential in nature and can offer employment when others do not. Starting from basic machining through advanced machining, close tolerance grinding, introduction into the world of CNC and Conversational programming, the production of detail parts and then their fit and assembly into a working product. This program
will ready the student for a wide variety of manufacturing careers through development of the skills and traits that manufacturers are looking for. This program can be started in any semester.

## Career Opportunities

Careers are available for entry-level in a wide variety of manufacturing careers which include, but are not limited to, the precision machining and tool-and-die industries. The Work- Based Learning Internship opportunity gives students a host of opportunities beyond the classroom.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 2145 - Shop Floor Programming
- CAM 2700 - Computer Aided Manufacturing Internship
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Advanced Quality, CRT

Program Code: ADQ.S.CRT • Credit Hours: 33-35

## Description

This advanced certificate will provide the student with the Basic Quality Certificate and then advance them further in the Quality field covering Advanced Metrology and Gauging used in various fields. Quality Assurance and Quality Control principles will be introduced to include the elements of different inspection categories, material conformance, sampling techniques, traceability methods, and the relationship to PPAP/First Article submission. The last major components of this certificate are Quality Management Systems \& Auditing as it relates to industry standards such as ISO, TS, FDA, and the Medical Device industries.

## Career Opportunities

Quality is in everything we do and the need for Quality technicians and personnel is growing every day. The courses in this certificate will give the student an upper-level hands-on experience of what it takes to work with many of the requirements of today's Quality technicians and managers.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1310 - Advanced Metrology \& Gauging
- ISE 1313-Coordinate Measurement
- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2310 - Quality Assurance
- ISE 2360 - Quality Management Systems \& Auditing
- MAT 1470-College Algebra OR
- MAT 1570 - Analytic Geometry \& Trigonometry


## Advanced Video Production, CRT

Program Code: VIDP.S.CRT•Credit Hours: 32

## Description

This one-year certificate introduces students to video production, including lighting and cinematography, motion design, video editing, and audio production. Students will learn the design process, including use of digital photography, appropriate applications; and, video and audio equipment to create quality videos.

## Career Opportunities

There are various career paths in video production. You could work in television, advertising, or news reporting. You also could apply your skills in education, government, or business industries. Within these settings, you could hold positions in a variety of positions, such as a video editor, camera operator, audio editor, live stream operator, or motion graphics. There are also freelance videographer opportunities.

## Program Requirements

- ART 2265 - Digital Color Photography I
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design
- VIS 2130 - Motion Design


## Advanced Web Design, CRT

## Program Code: WEBDES.S.CRT • Credit Hours: 32

## Description

This one-year certificate introduces students to web coding and design, including conceptualizing, designing, developing, and maintaining websites. Students will also learn UX/UI, motion design, and working with a web content management tool. Students will learn a variety of web concepts and digital design applications.

## Career Opportunities

Web designers develop, create, and test website or interface layout, functions, and navigation for usability. Web Designers typically work for corporations across industries, but they can also work for web design agencies or as self-employed individuals. They work closely with software and marketing professionals to make sure websites are designed coded correctly. Still others work in industries including publishing, management consulting, and advertising.

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design
- VIS 2130 - Motion Design
- VIS 2170 - Web Content Management


## Agribusiness Greenhouse Management, CRT

## Program Code: AGM.S.CRT • Credit Hours: 33

## Description

The Agribusiness Greenhouse Management certificate will prepare students for a successful business career in industries related to the food and agricultural system including input markets, farm production, greenhouse management, food manufacturing and distribution, and food and plant retailing. This program provides a broad-based study of the successful production of food, plants, and other agricultural products and will help students develop the skills for decision making and an understanding of the agricultural-food system dynamics. Upon completion, students will have the knowledge to enhance their contributions to agricultural enterprises or initiate their own entrepreneurial ventures.

## Career Opportunities

Job opportunities for this certificate include greenhouse manager, farm manager, grain and livestock buyer, crop producer, marketing head, quality controller, urban landscaper, inventory technician, landscape enhancement manager, landscape technician, etc.

## Program Requirements

- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1204 - Plant Propagation
- AGR 1206 - Horticulture II
- AGR 1208 - Sustainable Landscape Design
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior


## Agricultural Technology, CRT

## Program Code: AGR.S.CRT • Credit Hours: 31

## Description

The certificate will prepare students for employment in various areas of agriculture. Completers of this certificate will gain additional expertise in areas including agronomy, large animal science, agricultural economics, retail and customer service.

## Career Opportunities

Potential employment in agriculture includes agricultural technician, farm operations, farm retail, farm bureau representative or farm assistant.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- AGR 1300 - Agronomy OR
- AGR 1110 - Introduction to Large Animal Sciences: Handling \& Husbandry
- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural and Physical Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- LAW 1101 - Business Law AND
- AGR 1200 - Agricultural Economics OR
- AGR 1111 - Principles of Large Animal Reproduction AND
- AGR 1112 - Principles of Large Animal Nutrition


## Airframe Aviation Maintenance, CRT

## Program Code: AAM.S.CRT • Credit Hours: 31

## Description

The Airframe Aviation Maintenance certificate provides the knowledge and skill required by the Federal Aviation Administration (FAA) for the airframe maintenance technician student. Students will learn to apply the knowledge and skills covering the required sections of training for the Airframe certificate as required by the Federal Aviation Administration under Part 147 Appendix C. Those subjects include assembling and rigging, metallic and non-metallic structures, fuel
systems, electrical power production and distribution, instruments, communication/navigation systems, cabin atmospheric control systems, landing gear, hydraulics and pneumatics, fire protection systems, aircraft finishing, ice protection systems and welding inspections.

## Career Opportunities

Boeing Commercial Aircraft Company recently predicted 1,000,000 more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next 15-20 years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1106 - Airframe Safety Systems
- AVT 1107 - Fuel Systems
- AVT 1133 - Instruments/Communications
- AVT 1136 - Sheet Metal
- AVT 1214- Cabin Atmospheric Control
- AVT 1218 - Utility Systems
- AVT 2121 - Assembly \& Rigging
- AVT 2132 - Airframe Electrical Systems
- AVT 2236 - Non-Metallic Structures


## Architectural Design Technician, CRT

Program Code: ARCD.S.CRT • Credit Hours: 34

## Description

This program helps students develop residential and commercial architectural design skills. Design courses are combined with construction materials and building systems courses, providing a broad foundation for entry level architectural design work. Students will receive training to help them create and understand architectural drawings as well as proper use of building materials and components. Upon completion, students will be able to utilize various design and analysis software to assist with the development of architectural projects.

## Career Opportunities

Graduates are employed as designers and drafters for architectural and design-build firms. Many opportunities also exist in the building materials and assemblies' sales and supply area.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 1341-Architectural Design I
- CAT 2101 - Architectural Design II
- CAT 2201 - Architectural Visualization
- CAT 2431 - OSHA Construction Standards
- EGV 1301 - Architectural Energy Analysis
- IND 1234 - Materials \& Textiles
- VIS 1140 - Design Processes I


## Architectural Project Technician, CRT

Program Code: ARCP.S.CRT • Credit Hours: 30

## Description

This program is designed to build skills required for managing architectural projects in a variety of professional settings. Students will receive training to help them understand architectural practice, including an understanding of building materials and components, the financial aspects of project management, and the management skills necessary to deal with the diverse population of the industry. Upon completing this program, students will be qualified to move into project management positions in architecture and similar businesses.

## Career Opportunities

Graduates are employed as project managers in the architecture and construction industry. Many opportunities exist in the building materials and assemblies sales and supply area.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 2431 - OSHA Construction Standards
- CAT 2401 - Construction Project Management
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- COM 2211 - Effective Public Speaking
- EGV 1301 - Architectural Energy Analysis
- ENG 1101 - English Composition I


## Automotive Technology, CRT

## Program Code: AUT.S.CRT • Credit Hours: 37

## Description

The Automotive Certificate program is designed for students who want to become automotive technicians without pursuing an associate degree. Students will expand their knowledge of the automotive service
industry and secure employment with dealerships, independent service shops, machine shops and other corporate service jobs. .

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness to work and a high degree of professionalism may expect to find jobs in middle management or research occupations within major automotive corporations.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems


## Bakery Operations and Pastry Skills, CRT

## Program Code: BOP.S.CRT • Credit Hours: 35

## Description

This one year certificate focuses on basic baking as well as advanced techniques including bread making, pastry, and confections (such as chocolate work, sugar sculptures, and more).

## Career Opportunities

This certificate provides career opportunities in businesses that specialize in Breads, Fine Pastries, Chocolates, Candy's, restaurants, and the opportunity to be self-employed.

Program Requirements

- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2118 - Artisan Breads
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional


## Basic Manufacturing, CRT

## Program Code: BMFG.S.CRT • Credit Hours: 31

## Description

This certificate in Basic Manufacturing prepares the student for entry level positions in any of the following five: General Manufacturing, Computer Aided Manufacturing, Automation Technology, Mechanical Engineering Technology, and Industrial Engineering Technology. Completion of this certificate prepares the student to earn the Industry Recognized MSSC - Certified Production Technician Certificate.

## Career Opportunities

Basic Manufacturing prepares the student for entry level positions in any of the five areas within General Manufacturing, Computer Aided Manufacturing, Automation Technology, Mechanical Engineering Technology, and Industrial Engineering Technology. Completion of this certificate prepares the student to earn the Industry Recognized MSSC - Certified Production Technician Certificate.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- MET 1131-Personal Computer Applications for Engineering Technology
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD


## Bioscience Lab Skills, CRT

Program Code: BLS.S.CRT • Credit Hours: 30-32

## Description

The Bioscience Lab Skills certificate will prepare students for internships and some entry level jobs in bioscience laboratories. The students will learn the background of the biotechnology industry, basic lab safety and regulation, and the practical math needed to calculate reagents, dilutions and sample analysis.

## Program Requirements

- BIO 1107 - Human Biology
- BIO 1108 - Lab for Human Biology
- BIO 1111 - General Biology I AND
- BIO 1117 - Lab for General Biology I OR
- BIO 1171 - Principles of Biology I
- BIS 1120 - Introduction to Software Applications
- BTN 1110 - Biotechnology \& Bioethics
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- BTN 1130 - Biological Reagents Preparation
- BTN 1131 - Lab for Biological Reagents Preparation
- BTN 1201 - Biotechnology Careers
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- MAT 1470 - College Algebra


## Business Foundations Specialist, CRT

Program Code: BFS.S.CRT • Credit Hours: 33

## Description

This certificate takes the Entrepreneurship and Business Foundations STC one step further by preparing existing or potential entrepreneurs with background issues in skills such as customer service and negotiation techniques by addressing the application of basic principles of negotiation through the introduction and analysis of the negotiation process, case studies, and simulations. This certificate contains foundational courses that apply towards AAS in Business Management/Entrepreneurship.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own business or to work in larger companies in an entrepreneurial role.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106-Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2144 - Negotiation Techniques
- MRK 2220 - Small Business Marketing
- SOC 1101 - Introduction to Sociology


## Business Information Systems/Information Processing, CRT

Program Code: BUIP.S.CRT • Credit Hours: 30

## Description

This one-year certificate is intended to provide advanced software application training necessary to work improve efficiency and productivity and aid in business decision making.

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I


## Business Information Systems/Medical Office Specialist, CRT

## Program Code: BUMS.S.CRT • Credit Hours: 32

## Description

In this one-year certificate, students will work with various software applications, learn medical terminology, and take medical office and customer service courses that prepare them to work in a medical office environment.

Employment opportunities include medical office receptionists, secretaries, billing/insurance clerks, and medical office administrators in physician's offices, urgent care centers, managed care organizations, laboratories, nursing homes and hospitals.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- BIS 2180-Medical Office Simulation
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$. OR
- MAT 1120 - Business Mathematics


## Business Information Systems/Personal Computers in Business, CRT

Program Code: PCB.S.CRT • Credit Hours: 30

## Description

This one-year certificate is intended for those who want to update their knowledge of software applications and personal computer technology. Students will learn how to use personal computers for business administration, decision support and financial applications.

## Career Opportunities

Employment opportunities include paraprofessional positions in information technology, customer service and personal computer software application troubleshooting.

## Program Requirements

- BIS 1120- Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1131 - Business Writing
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior


## Business Management, CRT

## Program Code: BM.S.CRT • Credit Hours: 30

## Description

Students gain an understanding of business procedures to prepare them for a management position or update the management skills of those currently employed in a managerial, administrative or office support role.

## Career Opportunities

Students completing this certificate can expect to be prepared to work as supervisors or entry-level managers in retail, manufacturing or medium and small businesses.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ECO 1100 - Introduction to Economics OR
- ECO 2180 - Principles of Microeconomics
- ENG 1131 - Business Writing
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MAN 1107 - Foundations of Business
- MAN 1110 - International Business
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- Business Management Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.

Business Management Electives

- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2220 - Small Business Marketing
- MRK 2225 - Sales Fundamentals


## Business Transfer, CRT

## Description

This certificate is designed for the student who desires to complete Transfer Assurance Guide (TAG) courses to transfer into a four-year business program. This certificate can be used to help students from non-business backgrounds begin preparation for entrance into a Masters of Business Administration (MBA) program by packaging the prerequisite business core courses into a convenient certificate offering. Additionally, students wanting to pursue a two-year business degree or needing to augment current work skills with academic credentials may find this certificate beneficial.

## Career Opportunities

Employers more often than in the past require four-year business degrees or evidence that students are in the process of earning these credentials. This certificate serves as a credentialing tool for students to use in their career search, as well as, for currently employed students to show further evidence of growth and academic progress toward a bachelor's degree in business.

Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- ECO 2160 - Principles of Macroeconomics
- ECO 2180-Principles of Microeconomics
- ENG 1131 - Business Writing
- MRK 2101 - Principles of Marketing Management
- LAW 1101 - Business Law
- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Community and Public Services Specialist, CRT

## Program Code: CSS.S.CRT • Credit Hours: 30

## Description

The certificate takes the Social Service Assistant certificate one step further by preparing students to work in a variety of settings.

## Career Opportunities

Community and Social Service Specialist fob duties typically include working under the supervision of a program director, director of social services, social worker, or similar title.

Program Requirements

- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1106-Transition Skills
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- BIS 1120 - Introduction to Software Applications OR
- BIS 1400-Customer Service
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary OR
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- CJS 1165-Corrections OR
- SOC 2130 - Sociology of Family Violence OR
- SOC 2205 - Social Problems
- CJS 2111 - Ethics \& Professionalism in Criminal Justice OR
- SOC 1145 - Introduction to Cultural Anthropology
- ENG 1131 - Business Writing OR
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- LAW 1101 - Business Law OR
- SOC 2226 - Criminology


## Community Health Worker, CRT

## Program Code: AHCN.S.CRT • Credit Hours: 31-32

## Description

The Community Health Worker program curriculum is designed to prepare the student for employment as community health workers, patient navigators, and health insurance navigators. The aim of this certificate is to provide individuals with the expertise and experience in assisting individuals and communities to navigate the U.S. community health, health care and health insurance systems. The certificate offers a combination of classroom, lab and practical training that will help the student succeed in their future career. A portion of this program will involve 210 hours of non-paid practice at various facilities. A State and Federal Background check will be required prior to starting the clinical practice.

## Career Opportunities

Community Health Workers will be educated to obtain the expertise and experience in assisting individuals and communities to navigate the U.S. community health, health care, and health insurance systems, as well as to improve the equality and cultural competence of service delivery and accomplish personal prevention and health care goals.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1105 - Overview of Holistic Health
- ALH 1107 - Core Concepts of Public Health
- ALH 1250 - Health Science Practicum
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- MAS 1102 - Clinical Medical Assisting I OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe OR
- ALH 1120 - Nurse Aide Training
- MHT 1101 - Introduction to Mental Health Services
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development


## Community Service Support, CRT

Program Code: SWT.S.CRT • Credit Hours: 32

## Description

Students gain a better understanding of various sociological topics and how social problems can impact their communities. This certificate provides the knowledge and skills to provide assistance to Social Work and Social Service Professionals in the field and may perform duties such as providing information or referring individuals to public or private agencies for assistance, interviewing individuals or family members to compile information on social, educational, criminal, institutional, or substance abuse history; and advising clients regarding food stamps, child care, and transportation. Job duties may include transportation, visitation supervision, documentation, detention monitoring, school enrollments etc. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.m.

## Career Opportunities

A graduate of the Community Service Support certificate is employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve a degree in the Community and Public Service AAS or an AA in Social Work with additional coursework.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1106-Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 2138 - Ethical Issues in the Helping Professions
- SOC 1101 - Introduction to Sociology
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2205 - Social Problems
- SOC 2226 - Criminology
- SWK 1206 - Introduction to Social Work
- OT36 Arts and Humanities $\mathbf{3}$ Cr. Hr.(s)


## Computer Support Technician, CRT

## Program Code: SUP.S.CRT•Credit Hours: 31

## Description

Computer Support Technicians provide first level support for users on computers, software, mobile devices and other devices connected to a network. Students will learn to provide technical support and problemsolving of operating systems, computer networks, software applications, and will utilize interpersonal communication and customer service fundamentals. Students will have the opportunity to earn A+ certification, Microsoft Office Specialist (MOS) certifications and customer service certification in specific courses in the curriculum.

## Career Opportunities

Program prepares students to for entry-level positions as computer support technician, desktop support technician, IT help desk technician/representative, customer support specialist, technical support specialist, or IT service desk specialist/technician.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2731 - A+ Hardware \& Software
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1131 - Business Writing


## Corrections, CRT

## Program Code: COR.S.CRT • Credit Hours: 33

## Description

This certificate is designed to provide the student with the basics necessary for entry-level employment in a correctional environment. All courses can be applied to the Associate of Applied Science Degree in Corrections, if desired.

## Career Opportunities

There are openings in local and state correctional facilities, local nonprofit agencies providing correctional services, as well as employment through private prison corporations.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer Academy
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- SOC 1101 - Introduction to Sociology


## CPA Exam Eligibility: Business Component, CRT

## Program Code: CPABUS.S.CRT • Credit Hours: 30

## Description

In order to be eligible to sit for the CPA examination in the state of Ohio, a candidate must fulfill the basic requirements in both business and accounting courses. This certificate is designed for the student to obtain the business courses necessary to sit for the CPA exam. It will provide the pathway for a student who has earned a non-business bachelor's degree to transition to a career in accounting.

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- LAW 1101 - Business Law
- MRK 2101 - Principles of Marketing Management
- MAN 2150 - Management \& Organizational Behavior
- Accounting Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Accounting Electives

- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1350 - Web Site Development with HTML \& CSS
- ENT 2140 - Small Business Finance
- FIN 2450 - Personal Finance
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2155 - Management Information Systems
- MRK 2135 - Digital Marketing
- MRK 2225 - Sales Fundamentals


## Culinary Management, CRT

## Program Code: CM.S.CRT•Credit Hours: 31

## Description

This certificate takes the Food Production Specialist short-term certificate one step further by preparing students for management positions in the catering and food service industry. This certificate highlights customer service skills by incorporating concepts of the American business system and basic principles of the free market system along with fundamental tenets necessary for understanding management, motivation, and behavior in organizational settings. This certificate contains foundational courses that apply towards an Associate of Applied Science in Hospitality Management and Tourism/Culinary Arts.

## Career Opportunities

The restaurant industry is open to ex-offenders and is one of the fastest growing fields in the service sector of a global economy, 16.5 million people are currently working in this industry

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106-Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- HMT 1101 - Basic Culinary Skills
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2215 - Hospitality Cost Controls
- MAT 1120 - Business Mathematics

Program Code: CSFO.S.CRT • Credit Hours: 36

## Description

This one-year certificate focuses on back-of-the-house talents in culinary arts as well as the skills necessary to operate and oversee front-of-house tasks in most food \& beverage operations.

## Career Opportunities

This certificate provides career opportunities in the businesses of Food Trucks, Restaurants, College \& University Food outlets, as well as Hospital Food outlets, Grocery Stores, etc., and the opportunity to be self-employed. This certificate is not only skills oriented, but also has supervisory components as well.

Program Requirements

- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1125 - Beverage Management
- HMT 1129 - Restaurant Desserts
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2207-Butchery \& Fish Management
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional


## Cyber Investigation, CRT

## Program Code: CYSEC.S.CRT•Credit Hours: 33-34

## Description

Students will learn computer network protection, maintenance and usage of computer hardware and software, management of networks and operating systems, and criminal and constitutional law and IT criminal investigation, which includes evidence procedures and computer forensics.

## Career Opportunities

The Cyber Investigation Certificate will prepare students for careers in the areas of computer network protection, managing networks and operating systems and IT criminal investigation, which includes evidence procedures and computer forensics. Job titles include but are not limited to: Intelligence Analyst, IT Specialist (Government Breakout Codes 2210), Systems Administrator, Network Engineer,

Information System Security Manager, Cyber Security Incident Response Specialist and Private Investigator.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- CIS 2808 - Introduction to Computer Forensics
- CIS 2550 - Linux Operating System OR
- CIS 2731 - A+ Hardware \& Software
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2209 - Computer Crime
- CJS 2295 - Criminal Justice Science Seminar


## Data Analytics, CRT

## Program Code: DA.S.CRT • Credit Hours: 33

## Description

This certificate prepares students for entry-level data analytics positions requiring knowledge, setup and usage of business intelligence and data analysis solutions. Data analytics is expanding in businesses, government agencies and not-for-profit organizations, enabling them to make better decisions utilizing appropriate data and information. Students will have the ability to structure data and prepare reports in a way that is meaningful to business, government agency and not-forprofit organization users. Course work will include database concepts, data modeling, SQL, data analysis, data mining tools, mathematical and statistical techniques, project management and systems analysis. Emphasis is placed on strong communication skills necessary to interact with key users and understand their requirements.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts and network engineers.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions
- MAT 1455 - Introduction to Data Science
- MAT 2170 - Business Statistics I
- MAT 2180 - Business Statistics II


## Data Literacy Foundation, CRT

## Program Code: DL.S.CRT • Credit Hours: 32

## Description

This certificate will prepare students to work in a business setting and assist a data technician or data scientist with data management.
Students will learn how to collect, interpret, analyze, and turn raw data into meaningful, actionable insights. Students will gain the programming, math, visualization, and technical skills needed to solve specific problems and challenges within an organization. A data literate person has the ability to read, work with, analyze, and argue with data.

## Career Opportunities

Include the following: Data Analyst, Business Analyst, Data Analytics Manager, Business Intelligence Analyst and Data Mining Specialist.

## Program Requirements

- BIS 1120- Introduction to Software Applications
- BIS 1230-Spreadsheet Software
- CIS 1130 - Network Fundamentals
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- MAT 1455 - Introduction to Data Science


## Digital Marketing Communications, CRT

## Program Code: MRK.S.CRT • Credit Hours: 33

## Description

Digital Marketing professionals are essential in helping businesses and organizations establish and cultivate a strong Internet presence.
Students will develop a basic understanding of critical components of a digital marketing campaign such as marketing technologies, advertising and public relations, sales fundamentals and lead generation, customer engagement and social media, as well as marketing segmentation tools including geographic information systems. Students will have the opportunity to learn new media theories and marketing approaches while gaining hands on experience with digital marketing tools.

## Career Opportunities

Digital marketing specialists have opportunities for marketing communications, technical and management positions at all levels of virtually every type of business including small and medium-sized
businesses, advertising agencies, global corporations, non-profit organizations and even government agencies.

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2230-Social Media \& Consumer Engagement
- MRK 2250 - Digital Marketing Analytics


## Digital Marketing Technologies, CRT

## Program Code: MRKTEC.S.CRT • Credit Hours: 31

## Description

The Digital Marketing Technologies certificate will provide students with both theoretical and practical applications of digital marketing strategies and tools. This certificate will cover the foundational concepts in digital marketing including fundamental marketing concepts, advertising strategies, digital marketing approaches and tools, retailing and e-commerce, customer engagement and social media, graphic design, website development, consumer behavior and a marketing internship.

## Career Opportunities

Students completing this certificate may obtain an entry level position in digital marketing with state and/or local government, small, medium or large sized businesses, and non-profit organizations.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- MAN 1107 - Foundations of Business
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2236 - Consumer Behavior
- VIS 1140 - Design Processes I


## Energy Technology, CRT

## Program Code: ENRGY.S.CRT • Credit Hours: 30-31

## Description

This program is intended for students who are interested in an entrylevel position in the field of energy services. This program consists of HVAC, energy analysis and management, energy services and renewable energies courses.

## Career Opportunities

Energy technicians who can perform energy audits and test structures for energy efficient characteristics are in increasing demand.

Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1601 - Building Electric \& Controls
- EGV 1101 - Alternate \& Renewable Energy Sources
- EGV 1251 - Introduction to Energy Management Principles
- EGV 1301-Architectural Energy Analysis
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- EGV 2700 - Energy Management Technology Internship
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings


## Entrepreneurship, CRT

## Program Code: ENT.S.CRT • Credit Hours: 33

## Description

This certificate prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to traditional management courses, the following key areas are emphasized for entrepreneurs: financial plan development, marketing plan development and business plan development.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own businesses or to work in larger companies in an entrepreneurial role.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MRK 2220 - Small Business Marketing
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management OR
- MRK 2135 - Digital Marketing


## Fine Art Photography, CRT

Program Code: PHOT.S.CRT•Credit Hours: 30

## Description

The Fine Art Photography Certificate is designed for the student seeking a career as a fine artist. The certificate serves as a stand-alone program of study for individuals wishing to open photography studios or as a complementary base for students intending to complete the Associate of Arts, Art degree and continue their studies at four-year colleges and universities. The certificate ensures students gain a strong visual knowledge of current and historical photographic mediums. Students are exposed to studio photography, studio lighting techniques, alternative processes, darkroom-based and digital photography. This program maintains a strong foundation in film-based processes and darkroom printing techniques. The student will learn to operate small format 35 mm , medium format 120 , large format manual film cameras as well as digital camera operation. Basic computer imaging techniques will also be addressed.

## Career Opportunities

The Fine Art Photography Certificate prepares students to open their own photography studios or to transition into the Associate of Arts, Art degree program, where upon completion, they may continue their studies at four-year colleges, universities, or standalone art schools.

## Program Requirements

- ART 1161 - Black \& White Darkroom Photography I
- ART 1162 - Black \& White Darkroom Photography II
- ART 1170 - Alternative Photographic Processes
- ART 1171 - Studio Photography
- ART 1175 - Computer Photography
- ART 2235 - History of Photography
- ART 2265 - Digital Color Photography I
- ART 2294 - Photography Portfolio Development
- CHE 1011 - Chemistry in Modern Life for General Education
- CHE 1051 - Lab for Chemistry in Modern Life for General Education
- MAT 1110 - Math for Technologists OR
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1445-Quantitative Reasoning


## Food Service Management, CRT

## Program Code: FSM.S.CRT • Credit Hours: 35

## Description

The Food Service Management certificate program combines classroom instruction and laboratory experience in food preparation and service for the restaurant and hotel/lodging industry.

## Career Opportunities

The Food Service Management certificate program is designed to provide the initial knowledge for a student to begin at a management trainee level within a corporate or franchise food service operation. With further training and experience, the student should be able to accept more responsibility at a store manager's level.

## Program Prerequisite(s)

- HMT 1107 - Sanitation \& Safety


## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107-Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- PSY 1100 - General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Health Information Management Technician, CRT

Program Code: HIMT.S.CRT • Credit Hours: 30

## Description

The Health Information Management Technician certificate prepares students to work in a medical office setting. This certificate will focus
on preparing students for an entry-level office position in a medical facility where basic electronic health record technology, medical terminology, medicolegal principles and revenue-cycle principles are utilized. A grade of " C " or higher is required in all courses to receive the certificate.

## Career Opportunities

Healthcare record scanners, record clerks, receptionists, medicolegal technicians, patient-registration clerks, long-term care HIM positions, hospice HIM positions, insurance companies and healthcare facilities clerk.

## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1221 - Specialized Computer Applications for Health Information Management
- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2233 - Healthcare Information Systems


## Histotechnology, CRT

## Program Code: HT.S.CRT • Credit Hours: 33

## Description

The one-year technical certificate program in Histotechnology (HT) prepares students to enter the workforce as Histology Technicians. In this profession, graduates will be specialized clinical laboratory professionals who work in a hospital laboratory setting processing patient tissue samples onto microscopic slides for pathologists to examine for diagnostic or research purposes. This certificate program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Student Information packet located on the webpage. Students will have a maximum of three opportunities to successfully complete all general education courses required by the program. All course withdrawals (W) or failures (D) or (F) will count as an attempt. After a third unsuccessful attempt, the student is no longer eligible to enter or continue in the program. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Note: Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Accreditation with the National Accrediting Agency for Clinical Laboratory Science (NAACLS) is currently in process.

## Career Opportunities

Histology Technicians have a unique combination of theoretical and technical skills that make them employable in a number of job environments including hospital laboratories, clinics, research laboratories, industry, sales, technical support, administration and education. Employment of clinical laboratory technologists and technicians is projected to grow 5 percent from 2022 to 2032, faster than the average for all occupations. About 24,000 openings for clinical laboratory technologists and technicians are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Clinical Laboratory Technologists and Technicians, at https://www.bls.gov/ooh/healthcare/clinical-laboratory-technologists-and-technicians.htm (visited September 14, 2023).

## Program Pre-requisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I AND Minimum GPA of >2.7 AND
Pass a criminal background check AND
Students cannot be color blind for this certificate AND Vaccines required for practicum


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- CHE 1111 - Introduction to Chemistry I
- CHE 1151 - Lab for Introduction to Chemistry I
- CLT 2710 - Histology Topics I
- CLT 2713 - Lab for Histology Topics I
- CLT 2720 - Histology Techniques
- CLT 2723 - Lab for Histology Techniques
- CLT 2730 - Special Staining in Histology
- CLT 2733 - Lab for Special Staining in Histology
- CLT 2810 - CLT Practicum
- CLT 2910 - Histology Topics II
- CLT 2990 - Histology Practicum


## Hospitality Leadership and Administration, CRT

Program Code: HLA.S.CRT•Credit Hours: 30

## Description

The Hospitality Leadership and Administration one-year certificate is designed for those desiring to become a supervisor in hospitality operations. This one year certificate will benefit those interested in hospitality supervision, the calculations of cost control, front of the house menu planning and dining, POS systems, and more. There will
also be other opportunities to obtain additional certificates through the National Restaurant Associations Managed First program.

## Career Opportunities

This certificate provides career opportunities in the businesses of Hospitality Operations such all segments of food and restaurant industry, meeting \& event planning, and lodging operations.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105- Introduction to the Hospitality \& Tourism Industry
- HMT 1107-Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 C r} \mathbf{~ H r}(\mathbf{s})$.


## HVAC Light Commercial \& Residential Service, CRT

## Program Code: LCHS.S.CRT • Credit Hours: 31-33

## Description

This program is intended for entry-level students or residential service technicians desiring careers as light commercial HVAC service technicians. This program is a hands-on troubleshooting and service program geared to the light commercial HVAC industry including convenience stores, restaurants, strip malls and any other type of small business concern. Students learn the basics of heating, cooling, distribution and control of these HVAC systems. The hands-on component uses the types of equipment installed in the field.

## Career Opportunities

Students find work as service technicians, control technicians, or performing installation work for commercial and residential contractors.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1601 - Building Electric \& Controls
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings
- HVA 1401 - HVAC Mechanical \& Electrical Troubleshooting
- MAT 1110 - Math for Technologists OR
- MAT 1200-Technical Mathematics
- MET 1131 - Personal Computer Applications for Engineering Technology
- HVA 2700 - HVACR Engineering Technology Internship OR
- EGV 1251 - Introduction to Energy Management Principles OR
- EGV 1301 - Architectural Energy Analysis OR
- EGV 1401 - Weatherization \& Building Performance Training OR
- EGV 2351 - LEED Green Associate Exam Preparation OR
- CAT 1201 - Construction Methods \& Materials OR
- CAT 1401 - Construction Cost Estimating OR
- CAT 1741 - Residential Electrical Systems


## Industrial Internet of Things Technician, CRT

Program Code: IIOT.S.CRT • Credit Hours: 33

## Description

This one-year certificate provides the knowledge and basic skills needed to work in the automation industry as an entry-level support technician for Industrial Internet of Things (IIoT). In addition to advanced manufacturing and logistics warehousing, a growing number of IoT devices are created for consumer use, including connected automotive vehicles, home automation devices, wearable technology, connected health, and appliances with remote monitoring capabilities. Students who complete this certificate learn IIoT fundamentals, automation computer hardware, software, data management, and networking. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and necessary technical skills.

## Career Opportunities

This certificate program will provide the entry level education and training necessary to operate, program, diagnose, and repair microcontroller based IIOT devices and PLC based IIOT industrial machines. Graduates will be qualified to work for original equipment/system suppliers, consultants/third party support, as well as, equipment/system end users. All courses within certificate may be applied towards a degree in Internet of Things Cyber Technician, a high demand, high paying field.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"


## Industrial Robot Technician, CRT

Program Code: IRT.S.CRT•Credit Hours: 30

## Description

This certificate provides the knowledge and skills required to meet the needs for technicians in industries that either provide robots systems for sale or use robots in their production facilities.

## Career Opportunities

This certificate program will provide the education and training necessary to operate, program, diagnose, and repair industrial robots. Graduates will be qualified to work for original equipment/ system suppliers as well as equipment/system end users.

## Program Requirements

- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231 - Troubleshooting of Automated Systems
- EGR 2250 - Electromechanical Repair
- EGR 2252 - Teach Pendant Robot Programming


## Law Enforcement, CRT

## Program Code: CJLES.S.CRT • Credit Hours: 33

## Description

This certificate prepares the learner for future training and education in the field of law enforcement. The certificate enhances law enforcement professional skills and knowledge. It may assist the student in performing well in future civil service examinations for employment or
promotion. All courses in this certificate apply toward the Associate of Applied Science degree in Law Enforcement, if desired.

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice/law enforcement including those in court systems, court administration, patrol, victim services, investigation, and probation/parole.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology


## Legal Nurse Consultant, CRT

## Program Code: LNC.S.CRT•Credit Hours: 33

## Description

The Legal Studies program educates students with practical assignments in a "simulated law office" environment. All student work demonstrates the professional, ethical, and technology concepts they will use in the legal field. All full-time faculty are licensed attorneys. The objective of the Legal Nurse Consultant Certificate is to prepare the registered nurse to perform legal analysis of health care issues as well as prepare them for litigation preparation on medical malpractice and personal injury cases. Building on the nurse's education and clinical experience, the program will provide the practical skills and legal knowledge necessary to function in the legal arena. Additionally, instructors will ensure that nurses who take the program understand the role of the Legal Nurse Consultant in the greater community and what is involved in working as a consultant. This certificate is intended to enhance the attractiveness of an already obtained Nursing degree by providing students with practical skills needed to work in the legal field. All students are required to complete an attorney-supervised internship for hands-on experience using their practical skills. A grade of " C " or higher is required in all courses to remain in the program. Established in 1978, the Sinclair Legal Studies Program was the first paralegal program in the area, and the first in the area to be approved by the American Bar Association. Sinclair Legal Studies graduates hold a degree from an ABA-Approved program at a fully-accredited Ohio college. Students must take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Career Opportunities

LNCs combine nursing expertise with legal knowledge to advise attorneys, and others, on matters involving medical malpractice, personal injury, product liability, workers' compensation, healthcare licensure investigations, and other healthcare related cases. Legal Nurse Consultants can find themselves in positions where they: review and analyze medical records, screen for record tampering, interview clients, conduct research and summarize medical literature, evaluate liabilities and damages, assist with discovery and depositions, prepare exhibits and render informed opinions to attorneys on the delivery of health care and its outcomes for specific cases, assist in the selection of expert witnesses as needed, and serve as expert witnesses in cases involving nursing standards of care or related matters.

## Program Requirements

- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2401 - Legal Studies Internship
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- BIS 1221 - Specialized Computer Applications for Health Information Management
- HIM 1204-Medicolegal \& Ethics in Healthcare Records
- Legal Studies Elective $\mathbf{6 C r}$. $\mathbf{H r}(\mathbf{s})$.

Legal Studies Electives

- CJS 1105 - Criminal Law
- LAW 1101 - Business Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- MHT 1101 - Introduction to Mental Health Services
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2511 - Online Legal Research
- RES 1201 - Real Estate Law


## Legal Studies Post Baccalaureate Certificate, CRT

## Program Code: PAR.S.CRT • Credit Hours: 34

## Description

The Legal Studies Program educates students with practical assignments in a "simulated law office" environment. All student work demonstrates the professional, ethical, and technology concepts they will use in the legal field. All full-time faculty are licensed attorneys. Student learning is supported by experienced paralegals who serve as team teachers. This certificate is intended to enhance the attractiveness of an already obtained bachelor's degree by providing students with practical skills needed to work in the legal field. All paralegal students
are required to complete an attorney-supervised internship for hands-on experience using their paralegal skills. A grade of " C " or higher is required in all courses to remain in the program. Established in 1978, the Sinclair Paralegal Program was the first paralegal program in the area, and the first in the area to be approved by the American Bar Association. Sinclair paralegal graduates hold a degree from an ABAApproved program at a fully-accredited Ohio college. Students must take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Career Opportunities

Sinclair led the way with the first paralegal program in the Miami Valley in 1978, and it became the first to earn approval from the American Bar Association. Nearly a thousand graduates of Sinclair's Legal Studies Program now work in large and small law firms, the business world, courts, and government agencies. Under the supervision of a lawyer, a professional paralegal may perform such interesting duties as investigating cases, interviewing clients and witnesses, preparing legal documents, and legal research. These responsibilities are carried out in a variety of legal fields, such as criminal law, probate, family law, litigation, and real estate. Employment opportunity reports for program graduates are encouraging. Completion of the Legal Studies Program does not authorize a graduate to practice law as an attorney, or to give legal advice.

## Program Prerequisite(s)

- Approval of Department AND
- Students must have obtained a bachelor's degree with a GPA of 2.0 or higher from an accredited institution to be eligible to pursue this certificate.


## Program Requirements

- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2401 - Legal Studies Internship
- RES 1201 - Real Estate Law
- Legal Studies Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.

Legal Studies Electives

- CJS 1105-Criminal Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- PAR 2507 - Legal Interviewing Skills
- PAR 2511 - Online Legal Research


## Mechanical Drafter, CRT

## Program Code: MEDRAFT.S.CRT • Credit Hours: 34-35

## Description

The Mechanical Drafter certificate familiarizes students to the basics of the industrial design process, industry terminology, general practices, and latest versions of computer-aided drafting software. All courses are part of the Mechanical Engineering Technology associate degree.

## Career Opportunities

Professionals with basic mechanical engineering and software design skills are in demand by mechanical design firms.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MAN 2110 - Introduction to Project Management OR
- MET 1151 - Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts OR
- MET 2700 - Mechanical Engineering Technology Internship OR
- PHY 1141 - College Physics I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 2281 - Engineering Technology Professional Practice
- MET 1301 - SolidWorks Basics
- OT36 Social and Behavioral Sciences Elective 3 Cr. Hr(s).


## Medical Assistant, CRT

## Program Code: MAS.S.CRT • Credit Hours: 37

## Description

Medical assistants are multi-skilled professionals who assist physicians with the administrative and clinical aspects of patient care. This certificate is designed to be completed in three (3) semesters on a fulltime basis. The certificate consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located
on the webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all certificate courses. The student will be required to complete 210 hours of unpaid supervised practicum during their third semester of the certificate. Note: Healthcare Professional CPR, health certificate, immunizations, student health insurance, and background check must be completed prior to enrolling in the practicum component of the curriculum. The graduate is eligible to sit for a national exam to become a credentialed medical assistant.

## Accreditation

Sinclair Community College's Medical Assistant certificate program is accredited the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB). Commission on Accreditation of Allied Health Education Programs, 9355 113th Street N., \#7709, Seminole, FL 33775.

## Career Opportunities

Currently medical assisting is one of the fastest growing occupations in the United States with an expected increase in potential jobs by as much as $23 \%$ through 2028 (US Bureau of Labor Statistics, Sept. 4, 2019). Options for individuals seeking medical services and treatment: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMO's), multi-physician group practices and medical specialty clinics have opened new career opportunities.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes
- ALH 2201 - Survey of Drug Therapy
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1102 - Clinical Medical Assisting I
- MAS 1192 - Lab for MAS 1102
- MAS 1103 - Clinical Medical Assisting II
- MAS 1193 - Lab for MAS 1103
- MAS 1110 - Administrative Medical Assisting
- MAS 2201 - Clinical Medical Assisting III
- MAS 2291 - Lab for MAS 2201
- MAS 2210 - Medical Billing Specialist
- MAS 2220 - MAS Practicum

Ohio Peace Officer Basic Training Academy Professional, CRT

## Program Code: BPA.S.CRT • Credit Hours: 32

## Description

This program provides the Ohio Peace Officer training required by the State of Ohio for new Ohio law enforcement officers. Additionally, this program is designed specifically for cadets who wish to pursue a career
in law enforcement, and the training provided enhances one's ability to successfully receive a certificate of completion from the State of Ohio. This program is the foundation for graduates to further their educational pursuits and is limited to those persons who are officially enrolled in the Sinclair Community College basic training academy. Graduates of this program shall receive certificates of completion from the Ohio Attorney General's office indicating they have completed basic training and are certified to become commissioned law enforcement officers for Ohio agencies.

## Career Opportunities

Local and state law enforcement agencies as well as private investigation and personal protection agencies.

## Program Prerequisite(s)

Physical fitness assessment, fingerprint check, oral interview and college level ready for English.

## Program Requirements

- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II
- ENG 1101 - English Composition I
- PSY 1100-General Psychology OR
- SOC 1101 - Introduction to Sociology


## Paramedic, CRT

## Program Code: EPST.S.CRT • Credit Hours: 33-34

## Description

Paramedics are essential members of the health care team who provide time-sensitive care to patients. These individuals take the emergency department to people's homes, to highways and to other remote locations. Paramedics bring life-saving equipment and knowledge to bear in an effort to reduce patient's suffering and to save lives. Students will use lecture, laboratory and real-world exposure to emergencies to learn the skills needed to care for the sick and injured in the out-ofhospital environment. The program is offered to provide students with variability and flexibility in scheduling. For more information, contact the EMS department at 937-512-5338 for an entrance application packet.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidates state licensures/certifications.

## Program Prerequisite(s)

- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I with a grade of C or better AND
- Approval of Department AND
- Valid State of Ohio EMT Certification


## Program Requirements

- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for Emergency Medical Services Provider
- EMS 2105 - Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175 - Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200-Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical


## Polysomnography, CRT

## Program Code: PSG.S.CRT • Credit Hours: 35-36

## Description

A Polysomnographic Technologist performs overnight, daytime, or home sleep studies, polysomnograms, on people with suspected sleep disorders. They work under the general supervision of a physician or designee. The polysomnographic technologist responsibilities include, but not limited to recording and analyzing related data and report their technical findings to the physician to aid in rendering a medical decision. The foundation principles of the Polysomnography certificate are geared toward the specialties of sleep, medicine, respiratory, neurology and behavioral sciences. The program includes a non-paid, supervised practicum to provide students the "hands-on" clinical experience at an SCC affiliated healthcare facility. Requires Professional Healthcare CPR; background check; immunizations prior to END 1891 - Polysomnography Practicum.

## Accreditation

Sinclair Community College's Polysomnography Certificate is accredited by the Commission on Accreditation of Allied Health Education Program (CAAHEP: https://www.caahep.org/Home.aspx). The Committee on Accreditation for Education in Polysomnographic Technologist Education (CoA-PSG) and CAAHEP's Board of Directors recognized the program's substantial compliance with the nationally established accreditation standards. Commission on Accreditation of

Allied Health Education Programs, 9355 113th St. N, \#7709 Seminole, FL 33775 Phone: 727-210-2350 Fax: 727-210-2354

## Career Opportunities

Kettering Health Network, Premier and Dayton Children's hospital have all expressed the need for RPSGT prepared individuals. Average salary per year for a Polysomnographic Technician in Ohio is $\$ 55,310$ as of October 30, 2019, but the range typically falls between $\$ 49,730$ and $\$ 61,437$. Polysomnographic Technician Salary in Ohio | Salary.com

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- END 1421 - Intermediate Polysomnography
- END 1425 - Lab for Intermediate Polysomnography
- END 1430 - Advanced Polysomnography
- END 1435 - Lab for Advanced Polysomnography
- END 1801 - Seminar for Polysomnography Practicum
- END 1891 - Polysomnography Practicum
- END 2550 - Fundamentals of Polysomnography
- END 2585 - Lab for Polysomnography
- END 2460 - Neurophysiology of Electroencephalography/Sleep Disorders
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics


## Pre-Actuarial Science, CRT

Program Code: ACTU.S.CRT • Credit Hours: 30

## Description

Students will complete all first and second-year technical courses required for bachelor's programs in Actuarial Science. This coursework is aligned with the recommendations of the Society of Actuaries (SOA) for students preparing to take the SOA professional qualifying exams. See soa.org for more information.

## Career Opportunities

Actuaries work for insurance companies and other financial institutions that use mathematical models to quantify expected gains and losses in selling consumer financial products and in making investments. Students who complete this certificate program will be well on their way to pursuing career opportunities as actuaries, financial advisers, or statistical consultants.

Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting OR
- CIS 1111 - Introduction to Problem Solving \& Computer Programming OR
- MAT 2600 - Applied Statistics
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2320 - Linear Algebra


## Quality Control Technology, CRT

## Program Code: QCT.S.CRT • Credit Hours: 30-32

## Description

This certificate prepares students to apply basic quality tools to the testing and inspection of mechanical systems and to take the Certified Quality Technician exam from the American Society for Quality.

## Career Opportunities

This certificate is geared both to students who desire an entry-level position in the area of mechanical inspection or to skilled workers desiring upgrade training.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- COM 2211 - Effective Public Speaking
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313 - Coordinate Measurement
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt
- MAT 1470 - College Algebra OR
- MAT 1580 - Precalculus


## Recovery Service Support, CRT

## Program Code: SWS.S.CRT • Credit Hours: 35

## Description

This certificate can assist graduates in providing client services in a wide variety of fields such as psychology, rehabilitation, social work, and family support. In addition, students may assist social workers with
developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, and dependent care. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.

## Career Opportunities

Someone who completes the Recovery Service Support certificate may be employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve a degree in the Community and Public Service AAS or an AA Social Work with additional coursework.

## Program Requirements

- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 2205 - Social Problems
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work


## Residential Real Estate Renovation and Resale, CRT

Program Code: RERR.S.CRT • Credit Hours: 30

## Description

This program is designed for entrepreneurial individuals seeking to purchase, renovate, and resell residential properties. Students study business practices related to real estate and construction. Courses help develop hands-on skills applicable to residential renovation work, including carpentry, electrical, and HVAC work. Construction jobsite safety is emphasized. Graduates of this program possess skills necessary for residential real estate acquisition, renovation, and resale.

## Career Opportunities

Graduates have hands-on skills applicable to residential renovation work, including carpentry, electrical, and HVAC work, along with construction jobsite safety is emphasized. Graduates possess skills necessary for residential real estate acquisition, renovation, and resale.

Program Requirements

- ACC 1100 - Survey of Accounting OR
- ENT 2140 - Small Business Finance
- CAT 1201 - Construction Methods \& Materials
- CAT 1401 - Construction Cost Estimating
- CAT 2431 - OSHA Construction Standards
- CAT Construction Elective 5.5 Cr. $\mathbf{H r}(\mathbf{s})$.
- ENG 1101 - English Composition I OR
- ENG 1131 - Business Writing
- RES 1101 - Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1302 - Real Estate Investment: Analysis \& Financing
- RES 1401 - Real Estate Appraisal

Construction Electives

- CAT 1141 - Reading Architectural Drawings
- CAT 1701 - Construction Craft Skills/Concrete
- CAT 1721 - Structural Framing Systems
- CAT 1741 - Residential Electrical Systems
- CAT 1761 - Interior \& Exterior Finishes
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- CAT 2435 - Construction Credentials
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices


## Retail Manager, CRT

## Program Code: RMG.S.CRT • Credit Hours: 33

## Description

The Retail Management certificate is a business program where students learn the key skills needed for retail management success. The Retail Management certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, manufacturing and service industries. This certificate enables students to further build and develop their skills toolbox that will enable them to be successful in the workplace. Additionally, students with justice-involved backgrounds will gain the necessary tools to obtain viable employment in a growing field..

## Career Opportunities

The Retail Manager technical certificate takes the Retail Management certificate one step further by providing students with the necessary
skills to start or advance their career in the retail industry. Students will gain a greater understanding of the "why principles" thus enabling them to find their niche within the broad spectrum of retail careers..

## Program Requirements

- ACC 1100 - Survey of Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2275 - Retail Management Capstone
- MRK 2100 - Foundations of Marketing
- MRK 2220 - Small Business Marketing


## Sports Management, CRT

Program Code: SMAN.S.CRT • Credit Hours: 33

## Description

This certificate is designed to prepare students for careers in the field of sport and recreation management. Sports Management provides a solid foundation in sport related business. This certificate contains an embedded Coaching short-term certificate. Course work includes sports management, coaching, and leadership along with management, marketing, communication, business law, finance, and accounting. Students are prepared to enter a sports management profession.

## Career Opportunities

Students will have the opportunity to develop knowledge and relationships that lead to employment in one of Ohio's over 1,600 fitness centers and recreational sports centers. Students will have the foundational industry knowledge and business contacts necessary to pursue internships and careers.

## Program Requirements

- ACC 1100 - Survey of Accounting
- COM 2286 - Public Relations Principles
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 1114 - Introduction to Sports Management
- MAN 2144 - Negotiation Techniques
- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership
- MRK 2220 - Small Business Marketing


## Supply Chain Management, CRT

## Program Code: SCMC.S.CRT • Credit Hours: 30

## Description

Students gain a basic understanding of supply chain management processes to prepare them for a new position or to update the skills of those currently employed in a supply chain management (SCM) role.

## Career Opportunities

SCM specialists have opportunities for management positions at all levels in virtually every type of business, throughout small and medium-sized businesses, corporations, industries, nonprofit organizations and government agencies.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2225 - Small Group Communication
- ENG 1131 - Business Writing
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2101 - Introduction to Supervision OR
- MAN 2140 - Human Resource Management
- MAN 2110 - Introduction to Project Management OR
- MAN 2155 - Management Information Systems
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology


## Supply Chain Manager, CRT

Program Code: SMC.S.CRT • Credit Hours: 34

## Description

This certificate takes the Supply Chain Technician STC one step further by preparing students with background issues in skills such as customer service and supervision by addressing the basic principles of management through an assessment of skills and an analysis of situational factors that lead to the development of creative approaches to supervision. This certificate contains foundational courses that apply towards AAS in Business Management/Supply Chain Management.

## Career Opportunities

Upon completion of this certificate, students will be prepared to work as an entry-level supervisor in the field of logistics, purchasing and warehousing.

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106-Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAT 1120 - Business Mathematics
- SOC 1101 - Introduction to Sociology


## Surveying, CRT

Program Code: SUR.S.CRT • Credit Hours: 33-34

## Description

Certificate develops the skills needed to become employed as technicians for surveying or civil engineering firms.

## Career Opportunities

Surveying technicians assist professional surveyors in surveying for construction and land transfer activities.

## Program Requirements

- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2431 - OSHA Construction Standards
- CAT 2501 - GPS \& GIS for Engineering Technology Professionals
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2571 - NSPS Certified Survey Technician Preparation
- CAT 2581 - Legal Principles for Surveyors
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1200-Technical Mathematics OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- OT36 Social and Behavioral Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Description

This certificate in tool making provides the student with the technical and hands-on experience required by employers in both an entry and apprenticeship level. This program will provide experience in safety, advanced manual machining, drafting and design, Computer Numerical Control (CNC) and conversational programming, welding and metal joining, measurement tools and techniques, and other instruction and experience needed within this trade. This program is available to anyone and works well with the apprenticeship model or those that need to work and learn at the same time.

## Career Opportunities

The Tool Maker certificate gives the student the technical skills and abilities needed by someone entering this career field either independently or as an apprentice. This program is designed to compliment a full-time apprenticeship or the student that is required to work full-time while seeking a career in the precision machining industry.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1180 - Welding \& Metal Joining I
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## UAS Entrepreneurship, CRT

Program Code: UASENT.S.CRT•Credit Hours: 33

## Description

This certificate integrates technical Unmanned Aerial Systems (UAS) curriculum with business and entrepreneurship courses. There is a need in the Unmanned Aerial Systems (UAS) industry for entrepreneurial technicians who have the knowledge and skills to apply advanced technology and intellectual property (IP) in a variety of high-tech applications. Related to UAS, this includes aircraft, sensors, avionics, software, data analytics, and other advanced technologies.

## Career Opportunities

There are many opportunities in the Unmanned Aerial Systems (UAS) industry, both for those seeking to develop their own business or those hired as employees of an existing firm. In either case, the application of
entrepreneurial knowledge and best practices, complimented by technical knowledge, is required in a competitive UAS industry that is driven by rapid advances in technology and applications. Students completing this certificate will be prepared for success as they seek to establish and grow their own ventures or support an established organization.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAT 1470 - College Algebra
- MET 1131 - Personal Computer Applications for Engineering Technology
- MRK 2220 - Small Business Marketing


## Unmanned Aerial Systems, CRT

Program Code: UAS.S.CRT • Credit Hours: 32-34

## Description

The Unmanned Aerial Systems One Year Technical Certificate prepares students with the foundational knowledge and skills related to Unmanned Aerial System technology, tools, and applications needed to support industry as a pilot/operator, visual observer, ancillary ground crew member, or data analyst while following applicable laws, regulations, and standards governing operations in the National Airspace System. Students may choose one of the four specialization options including Precision Agriculture, First Responders, Geographic Information Systems, or Aerial Sensing Data Analysis.

## Career Opportunities

The rapid growth of the Unmanned Aerial Systems industry has created many new and expanded career opportunities for those pursuing a career in civil and commercial applications of the technology. Major opportunities exist in the areas of Precision Agriculture, First Responders, Geographic Information Systems, and Aerial Sensing Data Analysis. There is current and expanding industry demand for personnel with capabilities in Unmanned Aerial System operations, maintenance and data analysis.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- MET 1131 - Personal Computer Applications for Engineering Technology
- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis AND
- AVT 1123 - Acoustic \& CBRNE Data Analysis AND
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1108 - UAS First Responder Applications AND
- CJS 1101 - Introduction to Criminal Justice Science AND
- CJS 1155 - Homeland Security Issues \& Administration AND
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory OR
- AVT 1114-Geospatial Information for UAS AND
- CAT 1501 - Fundamentals of Surveying \& Mapping AND GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1112 - UAS Precision Agriculture AND
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200-Agricultural Economics AND
- AGR 1300-Agronomy


## Urban and Community Agriculture, CRT

## Program Code: UCA.S.CRT • Credit Hours: 31

## Description

The Urban and Community Agriculture Certificate will equip students with basic knowledge of plant science that is used for the growth, development, and utilization of cultivated plants. This knowledge will allow the students to propagate plants, implement sustainable landscape design, understand the science of soil, and will ultimately enable the student to operate and manage a greenhouse.

## Career Opportunities

This certificate will provide the skills for growing sustainable food in urban areas and communities.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1203 - Trees \& Shrubs
- AGR 1204 - Plant Propagation
- AGR 1205-Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design
- AGR 1209 - Greenhouse Management Capstone
- ENT 2140 - Small Business Finance


## Welding, Metal Joining, \& Fabrication, CRT

## Program Code: CAMWMF.S.CRT•Credit Hours: 30

## Description

Based on an Industry need this certificate meets specific needs in precision Welding, Metal Joining and Fabrication techniques that will align and work in conjunction with student and industry needs. This certificate will help students already working in industry and allow others to build skills that will help with entry level employment. This certificate program contains the Welding and Metal Joining (CAMWM.S.STC) embedded certificate which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate, please notify Registration and Student Records at studentrecords@ sinclair.edu.

## Career Opportunities

The student successfully completing this certificate will have the necessary skills and knowledge to design, build, weld and repair in a wide variety of situations which will be an addition to current skills or allow entry into many manufacturing careers which desire non-certified welders. These careers can range from entry level to higher level positions in Machine repair, Die and Mold repair, Metal Fabrication, Tool and Die shops, general repair shops and general manufacturing.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1180 - Welding \& Metal Joining I
- CAM 1181 - Welding \& Metal Joining II
- CAM 1182 - Welding \& Metal Joining III
- CAM 1184 - Weldability of Ferrous \& Nonferrous Metals
- CAM 2114 - Jig \& Fixture Design
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Short Term Certificate

## Additive Design Specialist, STC

Program Code: ADS.S.STC • Credit Hours: 10

## Description

This certificate will introduce students to additive design and manufacturing using 3D modeling software and 3D printers.

## Career Opportunities

This certificate provides students with the basic skills needed to work as a technician in rapid prototyping using 3D design, 3D printing, and post processing

## Program Requirements

- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process


## Aerial Sensing Data Analytics, STC

Program Code: UASDTA.S.STC • Credit Hours: 18

## Description

The Aerial Sensing Data Analytics Short-Term Technical Certificate provides an introduction to unmanned aerial systems (UAS) technologies, applications, and regulatory and legal considerations. The program prepares students for entry level positions as analysts of aerially collected electro-optical (EO) and infrared (IR), multi-and hyperspectral (MSI/HSI), synthetic aperture radar (SAR), light detection and ranging (LiDAR), acoustic, and chemical, biological, radiological, nuclear, and explosives (CBRNE) data.

## Career Opportunities

The Aerial Sensing Data Analytics Short-Term Technical Certificate will produce graduates who will serve the immediate Dayton area, broader region, and nationally. Graduates of certificate program will contribute to filling the current and growing need for data analysts that can process, interpret, present, and make decisions based on a variety of unmanned and manned aircraft collected data types. Positions exist in start-ups and existing established firms, with growth expected for the foreseeable future. The Association for Unmanned Vehicle Systems International estimates that there will be 100,000 new jobs related to unmanned aerial systems created by 2025.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis
- AVT 1123 - Acoustic \& CBRNE Data Analysis
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)


## Agribusiness, STC

## Program Code: AGR.S.STC • Credit Hours: 16

## Description

The agribusiness short-term certificate will introduce students to the agriculture industry and prepare them for entry into the agriculture workforce. Graduates of this certificate will be skilled in the foundations of business, agriculture, agricultural economics and agronomy.

## Career Opportunities

Potential employment in agriculture includes entry-level positions in the following: agricultural technician, farm operations, agronomy, agricultural finance and accounting, retail sales and licensed pest control.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1200 - Agricultural Economics
- AGR 1300 - Agronomy
- BIS 1120 - Introduction to Software Applications
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business


## Aircraft Dispatcher, STC

Program Code: ADSP.S.STC • Credit Hours: 24

## Description

The Aircraft Dispatcher certificate provides students with the theory and practical knowledge necessary to enter a career in the aviation industry as an aircraft dispatcher. Completion of this certificate will make the student eligible to take the knowledge and practical tests leading to the Federal Aviation Administration (FAA) Aircraft Dispatcher (ADX) certification. Students study aircraft performance, meteorology, crew resource management, air traffic control, advanced navigation, airline operations and FAA knowledge. Age Restrictions: To be eligible for an ADX certificate, a person must be at least 23 years of age. Individuals who are at least 21 years of age may take the ADX knowledge and practical tests. Individuals who pass the practical test prior to reaching 23 years of age are not entitled to the certificate itself but will be issued a Letter of Aeronautical Competency. Upon reaching 23 years of age, the FAA will issue the ADX certificate.

## Career Opportunities

Career opportunities are available in airline and corporate aviation.

## Program Requirements

- AVT 1105 - Orientation to Aviation
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1141 - Principles of Aviation Leadership
- AVT 2146 - Introduction to Airline Operations
- AVT 2157-Aircraft Performance I
- AVT 2158 - Aircraft Performance II
- AVT 2159 - Canadair Regional Jet (CRJ) Aircraft Systems
- AVT 2166 - Practical Dispatch Applications
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2168 - Dispatcher Oral Preparation
- MET 1131 - Personal Computer Applications for Engineering Technology


## Airline Flight Attendant, STC

## Program Code: AFAS.S.STC • Credit Hours: 12

## Description

The Airline Flight Attendant certificate provides students with the basic theory of airline travel with an understanding of the policies, procedures and means of compliance with Federal Aviation Regulations. Students explore the business of air commerce and develop the skills of a travel professional. Includes exploration of communications, safety and security, air travel, customer service, airline operations and crew resource management. This program develops the knowledge and skills required to serve as a flight attendant and to enter a career in the aviation industry.

## Career Opportunities

Career opportunities are available in airline and corporate aviation.

## Program Requirements

- AVT 1102- Orientation to Inflight Services
- AVT 1148 - Aircrew Emergency Management
- AVT 1151 - Crew Survival \& Rescue Techniques
- AVT 2146 - Introduction to Airline Operations


## Appalachian Studies, STC

Program Code: HUM.S.STC • Credit Hours: 16

## Description

The short-term technical certificate is designed for students who are planning on using Appalachian Studies to enhance their careers in a
variety of disciplines such as: Sociology, Social Work, Education, Government, Health Care, and Public Safety (i.e., fire and police work). The student who pursues this short-term technical certificate will use the certificate to supplement their professional development.

## Career Opportunities

This certificate enhances careers in Sociology, Social Work, Education, Government, Health Care, Public Safety and related fields.

## Program Requirements

- HUM 1141-Appalachian History \& Culture
- HUM 1142 - Native American History
- SOC 1101 - Introduction to Sociology OR
- SOC 1145 - Introduction to Cultural Anthropology
- REL 2255 - People \& Religion OR
- SOC 1108 - Appalachian Families OR
- SOC 2210 - Cultural Humility for Working with Youth
- GEO 1206-Appalachian Environment OR
- HIS 1101 - United States History I OR
- HIS 1102 - United States History II OR
- HIS 2215 - Survey of African History OR
- HIS 2218 - History of Ohio
- SCC 1101 - First Year Experience


## Artificial Intelligence (AI)/Autonomous Systems, STC

Program Code: UASAI.S.STC • Credit Hours: 23

## Description

This short-term certificate in Artificial Intelligence (AI)/ Autonomous Systems, which is fully embedded within the Bachelor of Applied Science degree in Unmanned Aerial Systems, gives the student the indepth knowledge they need to transform large amounts of data into actionable decisions. The program and its curriculum focus on how complex inputs - such as vision, sensor data, robotics, and huge databases - can be used to make decisions or enhance human capabilities. The curriculum includes coursework in aviation technology, computer science, math and statistics, robotics, computational modeling, machine learning and symbolic computation. The program includes courses from the Aviation Technology, Computer Information Systems (CIS), and Mathematics Departments.

## Career Opportunities

AI / ML Scientist and Engineers rank among the top emerging jobs, their roles have grown over $650 \%$ since 2012. Job growth in the next decade is expected to outstrip growth during the previous decade, creating 11.5 M jobs by 2026 , according to the U.S. Bureau of Labor Statistics. Based on the assets, capabilities, and resources focused on UAS / AVT technologies, the Dayton region and the State of Ohio are in a unique position to further secure their status as a destination of
choice for this expertise. The region continues to transition from automotive/heavy manufacturing to high growth industries integral to UAS / AVT including sensors, robotics, advanced data analytics and management, and advanced materials and manufacturing. The Dayton Development Coalition and the State of Ohio are dedicating significant resources to support growth related to UAS / AVT. Building upon the leadership role that Wright-Patterson Air Force Base is taking in UAS, coupled with Ohio's aviation heritage and strong aerospace industry, Sinclair's UAS program will continue to benefit the students, institution, and the region. And will further strengthen the regional capabilities related to UAS / AVT and advance their commercial integration at the local, state, and national levels.

## Program Requirements

- AVT 2240 - Human Factors in Aviation
- AVT 3300 - Artificial Intelligence (AI) in Aviation
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 4215 - Autonomous Systems in Aviation
- AVT 4220 - Human Autonomy Teaming in Aviation
- CIS 2266 - Python for Data Analytics
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence


## Automotive High Performance, STC

## Program Code: AHPC.S.STC • Credit Hours: 25

## Description

This short-term certificate provides in-depth, hands-on experiences in various areas of high-performance engines, an ideal choice to supplement a degree-seeking student wishing to specialize in the engine and fuel induction areas. The program is also designed to prepare students for the ASE (Automotive Service Excellence) engine machinist series. Courses are dedicated to specific areas of engine development: engine blocks, cylinder head and valve train, assembly and dynamometer testing. Fuel systems for performance engines are covered as well.

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in dealerships, independent shops, motor sports businesses and automotive machine shops. In addition, graduates are also employed as service managers, parts managers, sales representatives or motor sports specialist.

## Program Prerequisite(s)

- AUT 1108 - Automotive Engine Systems OR
- AUT 1115 - Automotive Engine Performance I


## Program Requirements

- AUT 1108 - Automotive Engine Systems
- AUT 1115 - Automotive Engine Performance I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems


## Automotive Maintenance \& Light Repair, STC

## Program Code: MLR.S.STC • Credit Hours: 14

## Description

This certificate provides the skills and training needed to earn an entrylevel position at an automotive maintenance repair facility. Courses included in the certificate will prepare students to pass the Automotive Service Excellence Maintenance and Light Repair Certification (ASE G1) test.

## Career Opportunities

Career opportunities are available in positions for automotive maintenance technicians in dealerships, independent shops and maintenance repair facilities. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems


## Automotive Service Consultant and Advising, STC

Program Code: AUTS.S.STC • Credit Hours: 4

## Description

The automotive service consultant short term certificate prepares for the C1 ASE Automobile Service Consultant Certificate test and the role as a service consultant/advisor in automotive repair facility.

## Career Opportunities

Students can obtain gainful employment as service consultants/ advisors at automotive repair facilities. Students are encouraged to take their C1 ASE exam Automobile Service Consultant Certification test to help secure employment.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1111 - Automotive Service Consulting \& Advising

Program Code: BPSE.S.STC • Credit Hours: 17

## Description

The Bakery Specialist short-term certificate program is designed to provide students the knowledge and skills necessary to be employed in a commercial retail bakery after completion.

## Career Opportunities

A student completing this short-term certificate will be eligible for a position as a baker in retail grocery baking departments or as a baker in an independent bakery.

Program Prerequisite(s)

- HMT 1107 - Sanitation \& Safety


## Program Requirements

- HMT 1102 - Kitchen Chemistry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 1128 - Baking II \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2126-Cake Production \& Cake Decoration
- HMT 2128 - Cake Decoration

Basic Baking and Fundamentals, STC

## Program Code: BBF.S.STC • Credit Hours: 13

## Description

This short-term certificate focuses on the science of baking as well as basic techniques using ingredients such as flour, leaveners, salt, sugar, dairy, fats, extracts, spices and other add-ins such as vanilla extract, chocolate chips, etc.

## Career Opportunities

This certificate provides career opportunities in businesses of bakeries and tortilla manufacturing, food and beverage stores, restaurants and other eating places, pretzel shops, and the opportunity to be selfemployed.

## Program Requirements

- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107-Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 1128 - Baking II \& Barista Basics
- HMT 2201 - Food Service Equipment, Design \& Maintenance


## Basic Drawing, STC

## Program Code: DRWG.S.STC • Credit Hours: 9

- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2207 - Butchery \& Fish Management


## Description

This short-term certificate provides basic proficiency in freehand drawing. The student will draw with a variety of materials including charcoal, pastel and ink. The student will be able to render threedimensional items on a two-dimensional surface and will be able to demonstrate proficiency in value, contour and perspective. This certificate will provide the student with a broad range of styles and historic sources for his or her work, whether the individual is a graphic designer or freelance illustrator.

## Career Opportunities

The Art department strives to provide students with high quality education experiences in the visual arts, and the short-term certificate in Basic Drawing prepares students to enhance their freehand drawing skills - especially professionals working in the fields of graphic design or freelance illustration.

## Program Requirements

- ART 1111 - Drawing I
- ART 1112 - Drawing II
- ART 1121 - Beginning Painting I OR
- ART 2111 - Intermediate Drawing I OR
- ART 2216 - Life Drawing \& Anatomy I OR
- ART 2221 - Intermediate Painting-Observation \& Concept OR
- ART 2222 - Intermediate Painting - The Figure


## Basic Preparation of Food, STC

## Program Code: BFP.S.STC Credit Hours: 9

## Description

This short-term certificate focuses on sanitation, knife skills, sauce making, food grade commercial equipment, and butchery.

## Career Opportunities

This certificate provides career opportunities in the businesses of Food Trucks, Restaurants, College \& University Food outlets, as well as Hospital Food outlets, Grocery Stores, etc., and the opportunity to be self-employed.

## Program Requirements

- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107-Sanitation \& Safety


## Basic Quality, STC

Program Code: IBQ.S.STC • Credit Hours: 18-20

## Description

This certificate provides the student with the basics of drafting and blueprint reading while developing AutoCAD techniques, and learning software applications that will be used throughout a career in quality. Covering various measurement techniques involving shop measuring instruments; correct use and care. Students learn the application of Geometric Dimensioning and Tolerancing (GD\&T) principles along with the Coordinate Measuring Machine (CMM) which also gives the student an Industry Recognized credential from Hexagon Intelligence for PC-DMIS for CMM 111 software. Basic Quality will prepare the student and give them the skills to improve customer relations, measure products, and processes, analyze current process control and capability and define and audit the quality management system. This certificate meets the needs of a student looking to enter many areas where the needs of basic quality knowledge are required to obtain an entry-level position.

## Career Opportunities

This certificate is a great opportunity for entry level employment in the quality control field or as an addition to other fields that will boost career opportunities by the addition of quality techniques. In addition the student will earn an Industry Recognized Certificate in OPT 1113 Coordinate Measurement from Hexagon Manufacturing Intelligence for "PC-DMIS for CMM 111".

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313 - Coordinate Measurement
- MAT 1470 - College Algebra OR
- MAT 1580 - Precalculus

Black Studies, STC

## Program Code: AFRE.S.STC • Credit Hours: 15

## Description

Designed for students who are planning on using Black Studies to enhance their careers in Social Work, Public Education, Urban Planning, etc. The student who pursues this Short-term Technical Certificate would plan to use this to supplement their professional
development or to strengthen a major for which Black Studies is a strong base.

## Career Opportunities

This certificate enhances careers in Social Work, Public Education, Urban Planning and related fields.

## Program Requirements

- AFR 1100-African-American Studies
- HIS 1105 - African-American History
- HIS 2215 - Survey of African History
- LIT 2234 - Literature of Africa, Asia, \& Latin America OR
- LIT 2236 - African-American Literature
- PSY 1160 - Black Psychology


## Business Operations Systems Support, STC

Program Code: BOSS.S.STC • Credit Hours: 19

## Description

Students completing this certificate will have the written and oral communication skills, as well as the computer skills, needed to effectively support computer operations for small, medium or large companies. These skills apply equally well to an entry-level help desk support position. Technical course work emphasizes operating systems and troubleshooting skills.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as help desk support, PC network technicians, IT technicians, Enterprise network technicians and Network Administrators.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- COM 2225 - Small Group Communication
- CIS 2731 - A+ Hardware \& Software
- ENG 1101 - English Composition I
- CIS 1510 - Windows Client Operating System OR
- CIS 2550 - Linux Operating System


## Call Center/Customer Service, STC

## Program Code: CC.S.STC • Credit Hours: 17-19

## Description

This certificate is designed for those interested in working in a customer service center, help desk, call center, or medical scheduling environment. All students will learn customer service skills and telephone techniques, as well as software applications and keyboarding.

Students then choose an area of focus to strengthen industry-specific knowledge in general call center, IT help desk, health care, or medical office.

## Career Opportunities

Since 2008, Sinclair has actively participated in the Dayton region's Contact Center Alliance (CCA), a group of over 50 area employers with call centers ranging from 5 to 2,000 employees. This alliance forecasts double digit growth over the next three years.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication
- HIM 1101 - Medical Terminology AND
- BIS 2180 - Medical Office Simulation OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe AND
- HIM 1101 - Medical Terminology AND
- MAS 1110 - Administrative Medical Assisting OR
- CIS 1107 - Introduction to Operating Systems AND
- CIS 1130 - Network Fundamentals OR
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior AND
- BIS 1230 - Spreadsheet Software OR
- BIS 1260 - Database Software


## Captioning, STC

## Program Code: CPC.S.STC • Credit Hours: 23

## Description

The Captioning Certificate is designed to prepare students for a position as a captionist in the workforce. The skills obtained will train students to provide accessible communication services to individuals with hearing loss or communication barriers. A field experience is required.

## Career Opportunities

Positions available to graduates include independent contractor and/ or staff positions.

Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1102 - Interpreting Theory \& Best Practices
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 2401 - Captioning
- ASL 2402 - Field Placement
- ENG 1101 - English Composition I


## CDA Preparation Certificate, STC

## Program Code: CDA.S.STC • Credit Hours: 9

## Description

This certificate includes three ECE courses which serve as the preparation courses for the completion of the CDA (Childhood Development Associate) certificate. These three courses provide the required content knowledge and development of the CDA portfolio. Successful completion of these courses and passage of required on-site observation will enable students to obtain the CDA certificate through the Council of Professional Recognition (CDA Council). A grade of C or better is required in all courses.

## Career Opportunities

The CDA certificate is the entry level credential required for childcare professionals. As of July 2020 the state of Ohio will require a minimum of a CDA certificate. Given the current severe shortage of qualified workers in childcare and preschool settings, the job market is very favorable.

## Program Requirements

- ECE 1400 - Introduction to Early Childhood Education CDA Preparation
- ECE 1401 - Introductory Child Development CDA Preparation
- ECE 1402 - Healthy \& Safe Environments CDA Preparation


## Certified Production Technician, STC

Program Code: CPT.S.STC • Credit Hours: 8

## Description

This certificate covers a wide array of skills and knowledge required in manufacturing such as safety, processes and production, measurement and quality practices, and maintenance awareness. Each of the four areas allows the student to earn a certificate for that area which leads to the Manufacturing Skill Standards Council Certified Production Technician certificate. This certificate is an Industry Recognized Certificate and is approved by the Ohio Department of Higher Education. Upon completion students will be eligible for entry-level manufacturing positions where they can demonstrate these skills and knowledge in a manufacturing setting.

## Career Opportunities

Employers are actively seeking the Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) credential holders as people that have already shown an aptitude for manufacturing along with a desire to obtain entry level jobs. This 8 credit hour certificate may be one of the best investments in education leading to gainful employment available today.

- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing


## Chemical Dependency Counseling, STC

## Program Code: CDC.S.STC • Credit Hours: 12

## Description

This series of courses is designed to meet the 180 clock hours of chemical dependency specific education required by the Ohio Chemical Dependency Professionals Board to apply for licensure. It is for individuals who have previously earned or are in the process of earning at least an Associate degree in behavioral science.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 22 percent from 2018 to 2028 , much faster than the average for all occupations.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2137-Treatment Techniques in Substance Use Disorders
- MHT 2235 - Family Dynamics of Addiction


## Chemical Dependency Counselor Assistant (CDCA) Preliminary, STC

## Program Code: CDCA.S.STC • Credit Hours: 3

## Description

This one course certificate meets the educational requirements for the CDCA: Chemical Dependency Counselor Assistant Preliminary. Within this course, the following topics will be discussed: theories and fundamentals of addictive illness and physical/mental effects of psychoactive drugs; dynamics of substance related and addictive disorders on persons, families and society; knowledge of disease concept, stigmas, identification, assessment, trends in treatment and relapse process. Students will also develop insights, challenge biases and identify personal and professional issues and will learn elements of professional/ethical behaviors.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 22 percent from 2018 to 2028, much faster than the average for all occupations.

## Program Requirements

- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary


## Chemical Dependency Counselor Assistant (CDCA) Renewable, STC

## Program Code: CDCAII.S.STC • Credit Hours: 2

## Description

This one course certificate meets the educational requirements for the CDCA Renewable credential with the Ohio Chemical Dependency Professionals Board. Content includes: addiction and treatment knowledge, individual and group counseling, evaluation, service coordination, documentation and professionalism.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 13 percent from 2018 to 2028, much faster than the average for all occupations.

## Program Requirements

- MHT 2130 - Fundamentals of Addiction Counseling CDCA Renewable


## Clinical Lab Assistant, STC

## Program Code: SP.S.STC • Credit Hours: 13-14

## Description

The Clinical Lab Assistant certificate prepares students for entry-level employment in the clinical laboratory setting performing specimen collection, quality assurance and other techniques fundamental to specimen processing. The program is designed to develop knowledge and understanding of medical terminology, lab rules and regulations, and universal precautions for a clinical laboratory.

Note: For students under age 18 there may be restrictions on participating in certain Health Science programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Employment opportunities exist for certificate completers in hospital laboratories, research laboratories, pharmaceutical companies and biotechnology companies.

Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1113 - Clinical Phlebotomy
- ALH 1114-Clinical Phlebotomy Practice
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- CLT 1200 - Introduction to Clinical Laboratory
- CLT 1203 - Lab for Introduction to Clinical Laboratory
- HIM 1101 - Medical Terminology


## Clinical Phlebotomy, STC

## Program Code: CPST.S.STC • Credit Hours: 6

## Description

This certificate is intended to provide entry-level competency to students seeking employment in the area of phlebotomy in health care settings. This certificate is also intended to provide expanded competencies and proficiencies to practicing health care professionals and students enrolled in health science programs. The students will be required to complete 105 hours of unpaid practicum during ALH 1114 Clinical Phlebotomy Practice. Students who complete this course will receive a certificate of completion.

Note: For students under age 18 there may be restrictions on participating in certain Health Science programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Completers will be able to obtain positions as phlebotomists in hospital laboratories, outpatient clinics and private medical laboratories.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1113 - Clinical Phlebotomy
- ALH 1114 - Clinical Phlebotomy Practice


## Coaching, STC

Program Code: COA.S.STC • Credit Hours: 6

## Description

The short-term certificate in Coaching is designed to provide the foundational knowledge that is essential for coaching any sport. Coaches help athletes master new skills, enjoy competing with others and develop self-esteem. The certificate includes topics in coaching and leadership, sportsmanship, coaching diverse athletes, behavior management, sport first aid, drugs in sport, and the games approach to coaching.

## Career Opportunities

Students with a Coaching certificate will find career opportunities in the school and community setting including youth organizations, recreation centers, YMCAs and city parks and recreation organizations.

## Program Requirements

- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership


## Computed Tomography, STC

## Program Code: CT.S.STC • Credit Hours: 5

## Description

This short-term certificate in Computed Tomography (CT) is designed to provide radiographers certified by the American Registry of Radiologic Technologists (ARRT) with didactic and clinical education in computed tomography. Didactic courses focus on CT principles while clinical courses provide students with real-life experience and development of hands-on skills needed to pursue employment in computed tomography.

## Career Opportunities

Completion of this short-term certificate program can lead to employment in comprehensive hospitals, suburban or rural outpatient centers, surgery centers, etc. as a Computed Tomography Technologist.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- RAT 2640 - Computed Tomography Practicum
- RAT 2640 - Computed Tomography Practicum
- RAT 2641 - Principles of Computed Tomography

Computer Aided Manufacturing Basic Machining Skills, STC

Program Code: CAMBMS.S.STC • Credit Hours: 12

## Description

This short term certificate (STC) is designed to enhance the machining skills of students who have taken machining courses in high school or to allow individuals with little or no experience in machining to quickly obtain a certificate which may in turn qualify them for an entry level position in a machining company. Course work is focused on introductory levels of manual machining and basic operation of CNC machines. This STC is the first half of the Computer Numerical Control Technology short term certificate and will provide students with a milestone of completion and the ability to continue their education up
to and including a two year Associate of Applied Science degree in CNC operations.

## Career Opportunities

Students who complete this certificate will become eligible for employment at an introductory level in the high tech field of machining. All courses contained within this certificate may be applied towards a degree in CNC operation; a high demand, high paying field.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Computer Aided Manufacturing Precision Machining, STC

Program Code: CAMPM.S.STC • Credit Hours: 18

## Description

This certificate is designed to provide basic precision machining skills to workers entering the field of manual machining. It is the first half of the Advanced Precision Machining Certificate and is provided for students who are wishing to enter the workforce with the minimum skill level required to become an effective machinist. All courses in this short-term certificate will lead to an AAS degree in Computer Aided Manufacturing Precision Machining. Course work focuses on basic machining skills necessary to operate manual lathes, mills, and grinders.

## Career Opportunities

Prepares individuals for entry level positions in precision machining (manual lathes, mills, grinders).

Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists

Computer Numerical Control Technology, STC

## Program Code: CNC.S.STC • Credit Hours: 24

## Description

The Computer Numerical Control (CNC) Technology short-term certificate program is designed for individuals who are looking to upgrade their current manufacturing skills along with students who are
interested in pursuing entry-level careers in the area of CNC machining. Coursework is focused primarily in the area of CNC lathe and mill operation, setup and programming. The courses included in this short-term certificate apply directly to the associate degree in Computer Aided Manufacturing, CNC Technology option.

## Career Opportunities

Prepares individuals for basic entry level jobs in CNC manufacturing.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2145 - Shop Floor Programming
- CAM 2204 - Computer Numerical Control Lathe Programming
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering Technology


## Construction Administration, STC

## Program Code: CADM.S.STC • Credit Hours: 19

## Description

This program is designed for experienced construction industry personnel to improve their construction administration skills. Students will receive training to help them understand construction from an administrative perspective, including an understanding of various project delivery methods, contractual obligations and responsibilities, the financial aspects of construction, change management, and the skills necessary to deal with the diverse population of the industry. Upon completing this program, personnel will be qualified to move into construction administration positions in the industry.

## Career Opportunities

Upon completing this program, craftspeople will be qualified to move into construction administration positions within the construction industry.

## Program Requirements

- CAT 1201 - Construction Methods \& Materials
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management


## Construction Supervisor, STC

## Program Code: CNTS.S.STC • Credit Hours: $\mathbf{2 5}$

## Description

This program is designed for experienced craftspeople of the construction industry to improve their supervisory and leadership skills. Students will receive training to help them understand the building construction industry from a management perspective, including an understanding of building materials and components, the financial aspects of building construction and the management skills necessary to deal with the diverse population of the industry. Heavy emphasis will be placed on safety. Upon completing this program, craftspeople will be qualified to move into management positions in the construction industry.

## Career Opportunities

Upon completing this program, craftspeople will be qualified to move into management positions within the construction industry.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1141 - Reading Architectural Drawings
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1211 - Construction Materials Testing
- CAT 1401 - Construction Cost Estimating
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials
- COM 2206 - Interpersonal Communication


## Construction Technician, STC

## Program Code: CNTC.S.STC • Credit Hours: 19-21

## Description

The purpose of this certificate is to develop knowledgeable construction workers with basic skills in construction. With a combination of classroom education, practical lab exercises and co-op internships, students will exit this certificate program with a solid introduction into carpentry, concrete finishing and residential electrical systems.

## Career Opportunities

Entry-level construction workers are in continuous demand for residential and commercial construction.

- CAT 1701 - Construction Craft Skills/Concrete OR
- CAT 1810 - Construction Techniques I
- CAT 1721 - Structural Framing Systems OR
- CAT 1820 - Construction Techniques II
- CAT 1741 - Residential Electrical Systems OR
- CAT 1830-Construction Techniques III
- CAT 1761 - Interior \& Exterior Finishes OR
- CAT 1840-Construction Techniques IV
- CAT 1781 - Construction Project
- CAT 2702 - Construction Management Technology Internship OR
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials


## Continuous Process Improvement, STC

## Program Code: CTIM.S.STC • Credit Hours: 12

## Description

This short-term certificate promotes technical communication skills and teamwork, project management skills, lean manufacturing and continuous improvement skills, application of quality principles, statistics and probability theories, and problem-solving skills as they relate to process improvement. This program reflects the underlying skills necessary for the successful application of six sigma methodologies and provides practice in measuring and improving processes that suffer from quality, throughput, and waste problems. The courses in this short-term certificate apply directly to the Industrial \& Systems Engineering Technology (OPTIO.S.AAS) degree.

## Career Opportunities

This program reflects the underlying skills necessary for the successful application of six sigma and lean methodologies. A typical title for an employee with these skills is Process Improvement Specialist.

## Program Requirements

- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt


## Corrections Officer, STC

## Program Code: CJCO.S.STC • Credit Hours: 24

## Description

This certificate is designed to provide the student with the basic skills necessary for entry-level employment as a corrections officer. All
courses can be applied to the Associate of Applied Science Degree in Corrections.

## Career Opportunities

The Corrections Officer Certificate will prepare students for a broad range of careers in local and state correctional facilities in addition to private prison corporations.

## Program Requirements

- BIS 1120- Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer Academy
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- ENG 1101 - English Composition I

CPA Exam Eligibility: Accounting Component, STC

## Program Code: CPAACC.S.STC • Credit Hours: 24

## Description

In order to be eligible to sit for the CPA examination in the state of Ohio, a candidate must have 24 semester hours of business courses plus 30 semester hours of accounting courses. This certificate is designed for the student to obtain the accounting courses to sit for the CPA exam. It will provide the pathway for a student who has earned a business bachelor's degree to transition to a career in accounting. If a student has a non-business bachelor's degree, they will also need to complete the CPA Exam Eligibility: Business Component certificate.

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1510 - Computerized Accounting Systems
- ACC 2101 - Intermediate Accounting I
- ACC 2102 - Intermediate Accounting II
- ACC 2211- Cost Accounting
- ACC 2212 - Managerial Accounting \& Finance
- ACC 2321 - Federal Taxation
- ACC 2435 - Auditing
- ACC 2322 - Advanced Taxation OR
- ACC 2510 - Advanced Accounting


## Customer Service Specialist, STC

## Program Code: CUS.S.STC • Credit Hours: 3

## Description

This one course certificate is designed for those seeking employment within a call center environment or those interested in improving their customer service skills and telephone techniques. Call centers have become quite sophisticated with effective measures for productivity. Students will learn how a call center operates and how the productivity measures are used.

## Program Requirements

- BIS 1400 - Customer Service


## Data and Information Management, STC

## Program Code: DIM.S.STC • Credit Hours: 18

## Description

Business analytics is expanding across industries as data is being used to inform business decisions. Students will learn to use various software applications to extract, prepare and visualize data to make business decisions.

## Career Opportunities

Prepares students for entry-level business analytics positions requiring knowledge, setup, and usage of business intelligence and business solutions.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- CIS 1160 - Introduction to Data Literacy
- CIS 2265 - Data Visualization with Tableau
- MAT 1120 - Business Mathematics


## Data Fundamentals, STC

## Program Code: DF.S.STC • Credit Hours: 23

## Description

This short term certificate provides the fundamental skills needed to prepare the IT professional for careers in data analytics. Students will have the ability to mine, organize, analyze, and visualize data in a way
that is meaningful to organizations. All courses in this short-term certificate apply to the Data Analytics degree.

## Career Opportunities

Opportunities include positions such as Data Engineer, Data Analyst, Business Intelligence Analyst, Data Manager, Visualization Analyst and Business Systems Analyst.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions
- MAT 1455 - Introduction to Data Science


## Deaf Studies ASL.S.STC

## Program Code: ASL.S.STC • Credit Hours: 18

## Description

Students completing this certificate will obtain valuable knowledge regarding Deaf Culture and American Sign Language. This certificate shows a conversational level of American Sign Language skill. Students seeking another degree or certificate may find this credential allows them to highlight additional language skills. This certificate does not teach interpreting nor is the holder of this certificate qualified as an ASL-English Interpreter. A grade of C or better is required in all ASL courses.

## Career Opportunities

Students may pair the Deaf Studies Short Term Certificate with any field in which they interact with people. As the third most used language in the United States, American Sign Language is beneficial to any individual in any career field. Students will be able to use the skills learned during the Deaf Studies Short Term Certificate courses to communicate directly with Deaf/deaf/Hard of Hearing/DeafBlind/DeafDisabled users of American Sign Language.

## Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 1228 - Intermediate American Sign Language I
- ASL 1229 - Intermediate American Sign Language II
- ENG 1101 - English Composition I


## Dental Assisting, STC

## Description

The student will be introduced to the fundamentals of working in a dental office as a chair-side dental assistant. Concepts and techniques of basic equipment, four-handed dentistry, oral evacuation, instrument identification, and proper use are discussed. Introduction to dental specialties are discussed. Oral examination, charting, medical and dental histories, sterilization, lab, and infection control procedures are emphasized. You are encouraged to complete Cardiopulmonary Resuscitation for the Health Care Provider (or ALH 1130 - Basic Life Support Training for Healthcare Provider) prior to entry to the Dental Assisting program. However, you can take it the first semester. Note: ALH 1130 will be waived for anyone with proof of American Heart Association Healthcare Provider Basic Life Support, see Academic Advising. Upon completion of this short-term certificate the graduate will be eligible to sit for the American Medical Technologies RDA examination. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Career options may vary according to state practice act restrictions. Dental assistants have a variety of career opportunities in a wide range of employment settings, including private practice, specialty practice, hospitals, HMOs, community health programs, school systems, dental product research, military bases, and secondary education settings.

## Program Prerequisite(s)

- ALH 1130 - Basic Life Support Training for Healthcare Provider AND
- Approval of Department AND
- GPA of 2.0 or Higher AND
- Completion of SCC Distance Learning Course AND
- Completed Program Application

Program Requirements

- ALH 1130 - Basic Life Support Training for Healthcare Provider
- COM 2206 - Interpersonal Communication
- DAS 1102 - Introduction to Dental Assisting Terminology
- DAS 1104 - Dental Assisting Techniques \& Materials I
- DAS 1105 - Lab Dental Assisting Techniques \& Materials I
- DAS 1204 - Dental Assisting Techniques \& Materials II
- DAS 1205 - Lab Dental Assisting Techniques \& Materials II
- DAS 1108 - Dental Assisting Office Management
- DAS 1206 - Dental Assisting Radiography
- DAS 1207 - Lab Dental Assisting Radiography


## Design Processes, STC

## Program Code: VISDP.S.STC • Credit Hours: 20

## Description

This certificate provides an introduction to the design process including hand sketching, development of thumbnails, digital illustration and imaging, page layout; and, composition techniques to support a variety of entry-level design positions. Students will be exposed to the latest version of the Adobe products.

## Career Opportunities

Students will be able to obtain entry-level positions in the field of print/graphic design.

## Program Requirements

- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1150 - Design Processes II
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production


## Dietary Manager, STC

## Program Code: DMST.S.STC • Credit Hours: 16

## Description

Graduates of the Dietary Manager (DM) Program are trained foodservice professionals in health care delivery systems. They understand basic nutritional needs of clients and work in partnership with dietitians, who offer specialized nutritional expertise. Approved by the Association of Nutrition and Food Professionals (ANFP), the curriculum includes 12 semester credit hours of classroom instruction, 2 semester credit hours of food lab instruction, and 200 hours of management and clinical directed practice coordinated by a Registered Dietitian Nutritionist (RDN). A minimum of 25 clinical directed practice hours are directly supervised by a RDN. Students are required to complete these field experiences at area community, foodservice and health care facilities. The program offers two tracks; one for students pursuing careers in Nutrition and Dietetics, and another track for students pursuing careers in Hospitality Management \& Tourism. Both tracks are designed to be completed in two (2) part-time consecutive terms. As an integral member of the health care and foodservice management teams, dietary managers are responsible for maintaining cost/profit objectives, purchasing goods and services for the department and supervising staff. Students of Sinclair's Dietary Manager Program are eligible to become pre-professional members of the Association of Nutrition \& Foodservice Professionals (ANFP), a nationally recognized organization that can be reached at PO Box 3610, St. Charles, IL 60174, 1-800-323-1908, www.anfponline.org This specially designed program enables students to enjoy benefits of ANFP membership while attending school. Graduates are eligible for professional ANFP membership. Benefits include networking, professional growth, educational enrichment, and developing leadership skills. Completion of the DM Program and successfully passing a national credentialing exam will enable graduates to become Certified Dietary Managers, Certified Food Protection Professionals (CDM, CFPPs) in accordance with the Certifying Board for Dietary Managers at https://www.cbdmonline.org/. The DM Program is fully approved by the Association of Nutrition and Foodservice Professionals (ANFP). Students must pass all DM certificate program courses with a "C" or
better. The Sinclair nutrition and dietetics programs are open to those age 16 and older.

## Career Opportunities

Graduates of Sinclair's Dietary Manager program can find employment in nutrition and dietary departments in hospitals, long-term care facilities, day care centers, school foodservice systems, correctional institutions and other noncommercial foodservice settings. Dietary managers may work as food service directors, assistant foodservice directors, supervisors, clinical care professionals, multi-department managers, high-level administrators in large service organizations, consultants or entrepreneurs.

## Program Requirements

- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2180 - Medical Nutrition Therapy for Dietary Managers
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2735 - Foodservice Retail Business Management \& Mid-Program Assessment
- DIT 2740 - Retail Business Management Directed Practicum


## Digital Marketing Analytics, STC

## Program Code: DMA.S.STC • Credit Hours: 12

## Description

The Digital Marketing Analytics Short-Term Certificate is designed to introduce, develop and reinforce basic digital marketing analytics skills and technical applications. Graduates learn how to monitor digital campaigns, collect metrics, and report findings using Google Analytics and other industry-relevant digital analysis applications. The ten-year occupational outlook for digital marketing specialists shows an anticipated $24 \%$ growth potential. All courses in this certificate can be applied to the Associate of Applied Science in Digital Marketing.

## Career Opportunities

Students obtaining the Digital Marketing Analytics Certificate will be able to work in any size organization that is using digital marketing and social media marketing. The certificate is not only for individuals that are new to the field of marketing, but to those individuals that are already working in the field, and want to update their skill set to include digital marketing analytics.

## Program Requirements

- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2250 - Digital Marketing Analytics

Digital Systems, STC

## Program Code: DS.S.STC • Credit Hours: 12

## Description

This short-term certificate offers knowledge and basic skills to work in the electronics industry as an entry-level support technician for digital systems. Courses provide knowledge about basic electrical measurement techniques, prototype assembly of electrical circuits, digital logic, Boolean algebra and basic digital systems. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and lab skills. The courses in this certificate lead into an associate degree in Electronics Engineering Technology at Sinclair.

## Career Opportunities

Provides opportunity to work as a support technician in the digital electronic field.

## Program Requirements

- EET 1150 - DC Circuits
- EET 2261 - Microprocessors
- EET 1131 - Digital Electronics

Digital Thread Engineering Technology, STC

## Program Code: DTET.S.STC • Credit Hours: 16

## What is the program about?

The Digital Thread Engineering Technology short-term technical certificate prepares students for entry-level positions requiring an ability to identify and effectively utilize digital thread and engineering tools related to manufacturing, logistics, data management, and cyber security.

## Career Opportunities

There is a rapidly growing need for technicians with experience in digital thread engineering technology. Students that complete this program will be well positioned to enter or advance in positions focused digital thread technologies, including those related to technician level manufacturing, logistics, data management, cyber security. Requirements for these skills are prevalent and growing in positions in government, industry, and academic organizations, both locally and nationally. Additionally, students completing the program will be prepared to pursue additional certificate and degree programs to further enhance their capabilities and skills.

- BIS 1010 - Digital Thread Data Management
- CIS 1010 - Digital Thread Cyber Security
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- MAN 1010 - Digital Thread Enhanced Logistics
- MET 1131 - Personal Computer Applications for Engineering Technology OR
- MET 1161 - Software Tools for Engineering Technology


## Dining Assistant, STC

## Program Code: DAST.S.STC • Credit Hours: 1

## Description

The Dining Assistant Program is a State of Ohio approved training course which provides practical skill development in feeding techniques and working with populations with self-feeding difficulties with a focus on the elderly. The program is designed to ensure that Dining Assistants have a basic understanding of the nutritional needs of long term care residents, communications and interactions involving the residents and staff, as well as behavior challenges and safety procedures involving residents.

## Career Opportunities

Students successfully completing the Dining Assistant short term certificate program will be eligible to apply for feeding assistant positions within the nutrition departments of long term care facilities in the state of Ohio.

## Program Requirements

- DIT 2101 - Dining Assistant Dietary Aide


## East Asian Studies, STC

## Program Code: EAS.S.STC • Credit Hours: 17

## Description

This short-term East Asian Studies Certificate is an interdisciplinary program consisting of five courses on East Asian history, language, culture, and business in the global context. The program is designed to provide students with in-depth study and training in the listed areas to complement their major field of study. The program prepares students for multiple academic and career paths with useful skills and worldly perspectives.

## Career Opportunities

Upon completion of the East Asian Studies certificate program, students will gain proficiency in East Asian history and Chinese or Japanese language with intercultural and international business skills. Students will be able to pursue careers in the following capacities: Employment in multicultural and international corporations, Work at a
local company related to East Asia like Fuyao Inc. or Honda Inc., be part of the foreign services, military service, judicial system, or in language translation, work as a consultant in fields like international politics, financial advisor for Asian markets, international marketing specialist, teaching at schools or universities or become a politician or a community leader.

## Program Requirements

- CHN 1101 - Elementary Chinese I AND
- CHN 1102 - Elementary Chinese II

OR

- JPN 1101 - Elementary Japanese I AND
- JPN 1102 - Elementary Japanese II
- COM 2245 - Intercultural Communication
- HIS 2217 - Survey of East Asian History
- MAN 1110 - International Business


## Electrocardiography, STC

## Program Code: ELST.S.STC • Credit Hours: 3

## Description

This program is intended to provide expanded skills among health care professionals as well as current Health Sciences students to increase marketability for employment. Electrocardiography (ECG) Technicians operate equipment that records and measures heart activity. These measurements are used to assist cardiologists and other physicians in diagnosing and treating cardiac (heart) and peripheral vascular (blood vessel) problems. Students who complete this program will receive a Short-Term Technical Certificate in Electrocardiography. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Electrocardiography Technician.

Program Requirements

- ALH 1110 - Principles of Electrocardiography


## Emergency Medical Responder, STC

## Program Code: EMR.S.STC • Credit Hours: 2

## Description

Emergency Medical Responders (EMR's) are personnel, typically not found within the healthcare setting, who as part of their job have to care for the sick and injured before an ambulance arrives. These individuals are educated to stabilize patients using very limited amounts of medical equipment. Police officers, safety officers, and others who would be expected to arrive at the scene of an injury or illness before the
ambulance could benefit from this education. Students will use lecture and laboratory environments to learn the skills needed to care for patients. For more information, contact the EMS department at (937) 512-5338 for an entrance application packet.

## Accreditation

This program is accredited by the Ohio Department of Public Safety, Division of Emergency Medical Services. Graduates of this program are eligible to take the National Registry of Emergency Medical Technicians EMR examination. Contact the EMS office at Sinclair Community College for additional information about accreditation or national testing.

## Career Opportunities

EMRs education can be used as within firefighting, police or safety officer roles. Most companies/departments will not hire a person who is solely an EMR. The purpose of this education is to augment the skills of those who may need to care for the sick and injured before the ambulance arrives.

## Program Requirements

- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory


## Emergency Medical Technician, STC

## Program Code: EBST.S.STC • Credit Hours: 7

## Description

Emergency Medical Technicians (EMTs) are essential members of the health care team who provide time sensitive care to patients. These individuals take the emergency department to people's homes, to highways and to other remote locations. EMTs bring life-saving equipment and knowledge to bear in an effort to reduce patient's suffering and to save lives. Students will use lecture, laboratory and real world exposure to emergencies to learn the skills needed to care for the sick and injured in the out-of-hospital environment. The program is offered to provide students with variability and flexibility in scheduling. For more information, contact the EMS department at 937-512-5338 for an entrance application packet.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidates state licensures/certifications - not whether the candidate is degreed. When local departments are hiring full-time employees, many of them are looking for paramedic/firefighters.

## Program Requirements

- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician


## Energy and Sustainability Technician, STC

## Program Code: EST.S.STC • Credit Hours: 8

## Description

This short-term certificate is intended for students who are interested in an entry-level position in the energy and sustainability technician field. The student will have the opportunity to earn their OSHA-10 card and have the potential to sit for the LEED Green Associate exam and Building Analyst exam by the Building Performance Institute (BPI).

## Career Opportunities

Career opportunities for students completing this short-term certificate include entry-level building positions as laborers, technicians, installers, operators, inspectors, and data collectors.

## Program Requirements

- CAT 1431 - OSHA Construction Standards 10 Hour
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- EGV 2700 - Energy Management Technology Internship


## Entrepreneurship and Business Foundations, STC

Program Code: EBP.S.STC • Credit Hours: 24

## Description

This certificate prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to a traditional management course, the following key areas are emphasized for entrepreneurs: financial plan development, marketing plan development and business plan development.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own business or to work in larger companies in an entrepreneurial role.

## Program Requirements

- BIS 1120- Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- SOC 1101 - Introduction to Sociology
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MRK 2220 - Small Business Marketing


## Expanded Functions for Dental Auxiliaries, STC

## Program Code: EFDA.S.STC • Credit Hours: 13

## Description

The Expanded Functions Dental Auxiliary (EFDA) Certificate is designed to prepare graduates for positions in private practice dental offices, dental clinics, federal, state and municipal health facilities. The Ohio State Dental Board allows Certified Dental Assistants, Registered Dental Assistants, and Registered Dental Hygienists to enroll in this training. Emphasis is placed on sealants, amalgam restorations, composite restorations and temporary restorations. Students will receive instruction and hands-on experience in restorative dentistry as it relates to expanded functions in Ohio. Once the training is complete, the student must take a state written and practical exam to demonstrate proficiency in placement of dental restorations. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

The Expanded Functions Dental Auxiliary Profession offers opportunities with excellent income and flexible scheduling. While most EFDAs work in general and specialty dental offices, alternative career opportunities are available. These include public health departments, community programs and clinics, teaching institutions, consumer advocate and consulting.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- EFD 1102 - Dental Anatomy for Dental Auxiliaries
- EFD 1202 - Expanded Functions for Dental Auxiliaries I
- EFD 1203 - Lab for Expanded Functions for Dental Auxiliaries I
- EFD 1302 - Expanded Functions for Dental Auxiliaries II
- EFD 1303 - Lab for Expanded Functions for Dental Auxiliaries II


## Family Advocate, STC

## Program Code: FAMA.S.STC • Credit Hours: 18

## Description

A short-term certificate competency based, task-specific training for Head Start Family Specialists, Family Service Specialists and Family Workers whose job it is to provide the support services which are needed by families to enhance the quality of their family life. Courses
in this curriculum will focus on achieving proficiency in the following areas: social work core knowledge, values, skills; social work ethics and theory, interviewing and documentation; group/organization and micro-level methodologies; collaboration and advocacy; understanding family dynamics, barriers to self-sufficiency, conflict resolution, cultural and social diversity issues, the relationship between social problems and institutional responses; aid in the development of beginning computer skills.

## Career Opportunities

This certificate enhances career opportunities in agencies and organizations that provide a wide variety of social services.

## Program Requirements

- COM 2206 - Interpersonal Communication
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207-Anti-Oppressive Social Work


## Fast Track Programming, STC

Program Code: FTPA1.S.STC • Credit Hours: 19

## Description

This certificate assures that individuals are equipped with current software development skills. It is intended either for experienced programmers looking to update their skill set or for people wishing to make a career change into the Information Technology field. The certificate focuses on the latest software development languages and approaches, object-oriented concepts and database theory.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts, and network engineers.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1202 - C++ Software Development OR
- CIS 2266 - Python for Data Analytics OR
- CIS 2207 - Data Structures \& Algorithms
- CIS 2165 - Database Management
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II

Fire Department Company Officer, STC

## Program Code: FCO.S.STC • Credit Hours: 5

## Description

Develop management, supervision and leadership skills that companygrade officers need to manage and command multi-company fire situations. This certificate meets the objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications Level II.

## Accreditation

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Program Prerequisite(s)

- Approval of Department $A N D$
- Certified Ohio Firefighter AND
- At least three years active duty experience.


## Program Requirements

- FST 2251 - Fire Officer I
- FST 2252 - Fire Officer II


## Fire Department Executive Officer, STC

Program Code: FEO.S.STC • Credit Hours: 6

## Description

Develop management, supervision and leadership skills required by upper-level executive-grade officers. These skills are needed to effectively manage fire protection and emergency services in today's complex fire service environment and command complex multicompany and multi-jurisdictional emergency incidents. This certificate meets objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications Levels III and IV.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- FST 2253 - Fire Officer III
- FST 2254 - Fire Officer IV


## Firefighter EMT, STC

## Program Code: FEMT.S.STC • Credit Hours: 19

## Description

This program provides training as outlined by the Ohio Division of Emergency Medical Services (state accrediting body) for Firefighter I, Firefighter II and Emergency Medical Technician. Sinclair Community College complies with all requirements as outlined by the Ohio Division of Emergency Medical Services. Successful students will be eligible to sit for state certification testing and eventually be eligible to become licensed/certified as a Firefighter I, Firefighter II, and EMT.

## Accreditation

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Career Opportunities

Students completing this program will find career opportunities in fire departments, private EMS agencies, and hospitals.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Food Production Specialist, STC

## Program Code: FPS.S.STC • Credit Hours: 28

## Description

The Food Production Specialist Certificate combines classroom instruction and laboratory experience in food preparation and service for the restaurant and catering industry.

## Career Opportunities

Employment opportunities after completing the Food Production Specialist Certificate and Bakery Specialist or Pastry Specialist include: short order cook, fast food cook, food preparation worker, baker, pastry cook, and galley cook.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1106-Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- HMT 1101 - Basic Culinary Skills
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2215 - Hospitality Cost Controls
- MAT 1120 - Business Mathematics


## Food Truck and Street Foods, STC

Program Code: FTSF.S.STC • Credit Hours: 15

## Description

Food Trucks and Street Foods have moved into the epicurean spot light in recent years and have moved from the fad stage into the newest and hottest food trend sweeping across America and beyond. In this shortterm certificate students will learn how to set-up and design a food truck operation as well as the requirements for food booths and mobile food stations.

## Career Opportunities

Street Food \& Food Trucks are ready-to-eat food or drink sold by a vendor, in a street or other public place, such as at a market or fair. It is often sold from a portable food booth, food cart, or food truck and meant for immediate consumption. Students will learn all the steps to creating a profitable operation of a street foods meals.

## Program Prerequisite(s)

- HMT 1101 - Basic Culinary Skills AND
- HMT 1107 - Sanitation \& Safety


## Program Requirements

- HMT 1101 - Basic Culinary Skills
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1129-Restaurant Desserts
- HMT 2203 - Street Foods \& Food Trucks


## General Aviation Maintenance, STC

## Program Code: GAM.S.STC • Credit Hours: 23

## Description

The General Aviation Maintenance certificate provides foundational knowledge and skills required by the Federal Aviation Administration (FAA) for the Aviation Maintenance Technician (AMT) student. To become an AMT, two ratings are required, the Airframe (A) and the Powerplant (P); this is commonly referred to as an "A\&P Certificate". The GAM.S.STC, the Airframe Maintenance (AAM.S.CRT) and Powerplant Maintenance (PPAM.S.STC) certificates are needed to
qualify the student to become an AMT. Students will learn to apply mathematics and physics, read and interpret aircraft drawings, conduct ground operations and servicing of aircraft, interpret maintenance publications, interpret FAA regulations, make correct and legal aircraft record entries, perform weight and balance calculations, understand basic electricity, understand makeup of materials used in aircraft manufacture, understand aircraft fasteners, inspect welds, inspect for aircraft deterioration (corrosion) and understand and perform aircraft repair methods. Students will learn to apply the knowledge and skills they have learned with extensive hands-on training in the aviation maintenance lab. Sinclair is an FAA-approved Aviation Maintenance Technician School (AMTS) under Part 147.

## Career Opportunities

The Aviation industry is experiencing a pressing shortage of aviation mechanics. In its most recent pilot and technician outlook report, issued in 2020, Boeing estimated that 739,000 new technicians would be needed worldwide during the next 20 years, much of it due to the large number of recent and upcoming retirements in the field...that includes 192,000 new technicians needed in North America.

## Program Requirements

- AVT 1113 - Drawings for Aviation
- AVT 1116 - Regulations for Maintenance
- AVT 1118 - Weight \& Balance
- AVT 1132 - Basic Aviation Electricity II
- AVT 1135-Materials \& Processes
- AVT 1213-Corrosion
- AVT 2143 - Review \& Recommendation
- AVT 2237-Aircraft Inspections


## Geographic Information Systems, STC

## Program Code: GEOIS.S.STC • Credit Hours: 19

## Description

The Geographic Information Systems (GIS) short-term certificate will provide students with both theoretical and practical applications of GIS. The certificate will cover the foundational concepts in GIS, including the principles of cartography and GIS, database management and analysis, data acquisition, and manipulation of georeferencing and geocoding.

## Career Opportunities

Students completing the certificate will have the technical skill set in GIS required to perform a variety of entry level positions in a variety of arenas, including, regional and local government agencies, business and community organizations.

Program Requirements

- CIS 2165 - Database Management
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1209 - Map Design \& Visualization
- GEO 2210 - Advanced Spatial Analysis
- MAT 1450 - Introductory Statistics


## Geospatial Technology Analyst, STC

## Program Code: GSTA.S.STC • Credit Hours: 22

## Description

The Geospatial Technology Analyst short-term certificate will provide students with both theoretical and practical applications of Geographic Information Systems (GIS). The certificate will cover the foundational concepts in GIS, database management and analysis, data acquisition, and manipulation of georeferencing and geocoding.

## Career Opportunities

This certificate is designed for those students who seek to enhance their job-related skills in becoming a GIS analyst. The U.S. Department of Labor Employment and Training Administration (DOLETA), for example, cites an annual growth rate of approximately 35 percent for the geospatial technology industry. Students completing the certificate will have the technical skill set in GIS required to perform a variety of entry level positions in a variety of arenas, including, regional and local government agencies, business, and community organizations.

## Program Requirements

- AVT 1120 - Electro-Optical \& Infrared Data Analysis OR
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II
- GEO 1215 - Introduction to Remotely Sensed Imagery OR
- EET 1121 - UAS Remote Sensing \& Analysis AND
- EET 1158 - Aerospace Spatial Visualization
- GEO 2210 - Advanced Spatial Analysis


## Geospatial Technology Programming Specialist, STC

Program Code: GST.S.STC • Credit Hours: 20

Students learn advanced applications in geographical information system software, ArcGIS; C++ software programming skills; how to design and implement websites for internet delivery of data; design and administer relational databases; query databases using SQL.

## Career Opportunities

Graduates of this certificate will be able to build upon already existing programming skills to find employment in government and within private industry employing computer programmers with general GIS skills and knowledge such as: Database Developer or Software Applications Programmer. According to the Bureau of Labor and Statistics (www.bls.gov), "As a result of rapid employment growth over the 2008 to 2018 decade, job prospects for computer software engineers should be excellent."

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 2210 - Advanced Spatial Analysis


## Global Studies, STC

## Program Code: GSC.S.STC • Credit Hours: 24-25

## Description

The Global Studies Certificate provides students seeking a multicultural credential an opportunity to earn a short-term certificate that is completely aligned with a variety of AA degrees. Sinclair students with the desire to acquire knowledge and analytical skills in political, social, historical, scientific, linguistic, economic and cultural aspects are well suited for pursuing this certificate.

## Career Opportunities

Designed for students who are planning on using Global Studies to enhance their careers in: global cultural industries in music, film, sports, and consumer life; global environmental management; global health; global marketing; human justice organizations; international governance; international humanitarian service; international development agencies; international business; mass communication; travel, tourism and international hospitality management; and United States government offices and agencies. The student who pursues this short-term technical certificate would plan to use this to supplement their professional development or to strengthen a major for which Global Studies is a strong base.

## Description

- SCC 1101 - First Year Experience
- SOC 1145 - Introduction to Cultural Anthropology
- GEO 1101 - Global Forces, Local Diversity OR
- GEO 1102 - Earth's Physical Environment OR
- GEO 1201 - World Regional Geography: People, Places \& Globalization
- Language Electives $8 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- HIS 1101 - United States History I OR
- HIS 1111 - Western Civilization I OR
- HIS 1112 - Western Civilization II OR
- HIS 2215 - Survey of African History OR
- HIS 2216 - Survey of Latin American History OR
- HIS 2217 - Survey of East Asian History OR
- HIS 2219 - Survey of the Middle East OR
- HUM 1125 - Introduction to the Humanities OR
- PHI 2205 - Introduction to Philosophy
- PLS 2200 - Political Life, Systems \& Issues OR
- PLS 2220 - International Relations OR
- PLS 2860 - Model UN/International Issues
- REL 1111 - Eastern Religions OR
- REL 1112 - Western Religions


## Greenhouse Technician, STC

## Program Code: GHT.S.STC • Credit Hours: 16

## Description

The Greenhouse Technician Certificate will equip students with basic knowledge of plant science that is used for the growth, development, and utilization of cultivated plants. This knowledge will allow the students to propagate plants, implement sustainable landscape design, understand the science of soil, and will ultimately enable the student to operate and manage a greenhouse.

## Career Opportunities

Graduates of the Greenhouse Technician Certificate program are employable as entry-level positions in the nursery, landscape, or agricultural industry. Instruction and practical application of learned skills provide a broad occupational background that appeals to prospective employers.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1205 - Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design

Program Code: HCA.S.STC • Credit Hours: 7

## Description

The Home Health Aide certificate prepares students to perform the basic skills necessary to provide personal care services and activities to elderly, convalescent, or disabled persons in the home of patients or in a residential care facility. Students will be able to demonstrate basic nursing care and the skills required to promote health and healing for patient, as well as implement nursing care that decreases risks and follows safety procedures. Upon completion of ALH 1120 - Nurse Aide Training, students are eligible to sit for the State Test for Nurse Aide Training to become a State Tested Nurse Aide (STNA).

## Career Opportunities

Career opportunities for Home Health Aide include, but are not limited to, hospitals, home health care, long-term care and rehabilitation centers.

## Program Requirements

- ALH 1120 - Nurse Aide Training
- ALH 1250 - Health Science Practicum


## Hospitality Reception and Service Specialist, STC

## Program Code: HRSS.S.STC • Credit Hours: 2

## Description

This certificate prepares individuals to work in the luxury service environment, while mastering the importance of soft-skills and strategies to resolve some of the most difficult challenges involving high end hospitality clientele.

## Career Opportunities

Upon completing this credential, students will have gained the knowledge for entry level employment as a guest relations associate within an upscale hotel, matre d for a fine dining establishment, receptionist at an established travel firm, or sales associate for a convention bureau. Ultimately, this is the first step toward completing a Degree in Hospitality Management.

Program Requirements

- HMT 1105 - Introduction to the Hospitality \& Tourism Industry


## Human Resource Management, STC

Program Code: HRMT.S.STC • Credit Hours: 18

## Description

This certificate provides the opportunity to develop and refine human resources skills. The curriculum covers laws and regulations related to employment, implications of decisions and their effect on business as well as employee motivation. Also addresses human resource applications in strategic human resource management, workforce planning and employment, human resource development, total compensation and rewards, employee and labor relations and risk management. Contemporary approach to human resource management using a diagnostic model of internal and external influences.

## Career Opportunities

Students completing this certificate will be qualified to apply for Human Resource Specialist positions, in some cases, or will be prepared to further their studies in the human resources area within a four-year institution.

## Program Requirements

- COM 2206 - Interpersonal Communication
- FIN 2450 - Personal Finance
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems


## Industrial Maintenance Technician, STC

## Program Code: INDMT.S.STC • Credit Hours: 26-28

## Description

The Industrial Maintenance Technician certificate provides the knowledge and skill required for installing, maintaining and troubleshooting modern industrial machinery. Students will learn to solve practical maintenance problems, read and interpret mechanical drawings and interpret maintenance publications.

## Career Opportunities

This certificate will provide the necessary background to perform industrial maintenance operations on a wide range of electromechanical equipment.

## Program Requirements

- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231-Troubleshooting of Automated Systems
- MET 1301 - SolidWorks Basics OR
- CAM 1107 - Introduction to Mechanical Drafting with CAD


## Industrial PLC Programming Technician, STC

Program Code: PLC.S.STC • Credit Hours: 8-10

## Description

This certificate provides students and working professionals the basic necessary knowledge and skills to operate, program, and diagnose Programmable Logic Controller (PLC) based control systems in advanced manufacturing automation process operations, Original Equipment Manufacturer (OEMs), and logistics/supply chain high-tech warehousing automation operations. This program covers digital fundamentals used in all of today's computers, PLC hardware, PLC ladder logic programming, PLC I/O wiring diagrams, PLC communication architecture, networking, HMIs (Human Machine Interface) in a hands-on learning environment on several different types of PLCs.

## Career Opportunities

Graduates will be qualified for entry level work as a PLC technician for original equipment/system suppliers, consultants/third party support, as well as, equipment/system end users. Manufacturing industries that require PLC Programming Technicians include food, pharmaceutical, defense, aerospace, chemical, plastics, steel, metals, paper, textiles, and automotive industries. Graduates typically work in manufacturing process support, maintenance support, engineering support, sales/service support, or consulting functions. All courses within certificate may be applied towards a degree in Automation \& Control Technology with Robotics, a high demand, high paying field.

## Program Requirements

- EET 1198 - Digital Technology OR
- EET 1131 - Digital Electronics
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers

Industrial Robotics \& PLC Programming Technician, STC

Program Code: IRPLC.S.STC • Credit Hours: 17-19

## Description

This certificate extends the knowledge and skills students learn in the Industrial PLC Programming Technician certificate by teaching students to operate, program, and troubleshoot robotic-cells and control systems used in advanced manufacturing operations, Original Equipment Manufacturer OEMs, logistics/supply chain centers, and automated warehousing operations. This program covers digital fundamentals common to today's computers, basics of automated systems, Robotic Teach Pendant Programming (TPP), Robotic Handling Tool fundamentals, Programmable Logic Controller (PLC) hardware, PLC ladder logic programming, PLC I/O wiring diagrams, PLC communication architecture, networking, Human Machine Interface (HMIs) in a "hands-on" learning environment setting.

## Career Opportunities

This certificate program will provide the education and training necessary to operate, program, diagnose, and repair PLC \& industrial robots. Graduates will be qualified to work for original equipment/system suppliers, consultants/third party support, as well as, manufacturing and supply/chain logistics warehousing equipment/system end users. All courses within certificate may be applied towards a degree in Automation \& Control with Robotics, a high demand, high paying field.

## Program Requirements

- EET 1198 - Digital Technology OR
- EET 1131 - Digital Electronics
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2231 - Troubleshooting of Automated Systems
- EGR 2252 - Teach Pendant Robot Programming


## Information Systems Security, STC

## Program Code: ISSC.S.STC • Credit Hours: 18

## Description

This certificate will help prepare students and working professionals to perform effectively in the Information Assurance area of Information Technology. The courses required for this certificate have been reviewed and validated by the NSA. Students completing the courses outlined here will receive the ISSC Certificate jointly issued by Sinclair Community College and the NSA. Because the specified content in these six courses has been approved, course credit earned by articulated or proficiency cannot be accepted.

## Career Opportunities

With the increased awareness of the need for computer and network security in government, industry and education, there are greatly increased opportunities for students prepared to work in Information Assurance. Students and working professionals completing this certificate will have significantly enhanced opportunities to pursue jobs in the Information Assurance arena within the Federal government, Department of Defense and/or private industry

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment OR
- CIS 2650 - Ethical Hacker

International Business, STC
Program Code: INTB.S.STC • Credit Hours: 18

## Description

This certificate allows students to explore content and experiences relevant to employment in multinational firms and Non-Governmental Organizations (NGOs). Students will learn technical information that is applicable to further study in international business as well as direct employment in organizations operating on a global basis.

## Career Opportunities

Students will have the opportunity to develop knowledge and relationships that lead to employment in multinational organizations. Students will have the foundational knowledge and business contacts to pursue internship and careers throughout the world, if they so choose.

## Program Requirements

- GEO 1201 - World Regional Geography: People, Places \& Globalization
- MAN 1107 - Foundations of Business
- MAN 1110 - International Business
- MAN 2150 - Management \& Organizational Behavior
- SOC 1145 - Introduction to Cultural Anthropology
- Business Management Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Business Management Elective

- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2270 - Management Internship
- MAN 2279 - Business Management Capstone
- MRK 2100 - Foundations of Marketing
- MRK 2101 - Principles of Marketing Management
- MRK 2135 - Digital Marketing


## Internet of Things Technician, STC

Program Code: IOTT.S.STC • Credit Hours: 19

## Description

This short term certificate offers knowledge and basic skills to work in the electronics/programming industry as an entry-level support technician for Internet of Things (IoT). In addition to advanced manufacturing, a growing portion of IoT devices are created for consumer use, including connected vehicles, home automation, wearable technology, connected health, and appliances with remote
monitoring capabilities. Micro-controllers are the heart of any IoT device. Graduates learn micro-controller hardware, programming applications, networking, and security. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and necessary technical skills.

## Career Opportunities

This certificate program will provide the entry level education and training necessary to operate, program, diagnose, and repair microcontroller based Internet of Things (IoT) devices. Graduates will be qualified to work for original equipment/system suppliers, consultants/ third party support, as well as, equipment/system end users. This certificate is not only for individuals that are new to the field of IoT, but to those individuals that are already working in the field, and want to update their skill set. All courses within the certificate may be applied towards an Associate in Applied Science degree in Internet of Things Cyber Technician, a high demand, high paying field.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2640 - Network Security
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"


## IT Fundamentals, STC

## Program Code: ITFN.S.STC • Credit Hours: 18

## Description

This certificate provides the fundamental courses needed to prepare for any of the multiple Computer Information Systems (CIS) programs or areas of specialization. It allows students to experience introductory courses in various disciplines as preparation for their chosen degree objective. All courses in this certificate apply to the various degree programs in the Computer Science and Information Technology Department.

## Career Opportunities

Entry level positions in various areas including user support, system administration and network management will be available to students completing this certificate. Many employers are quite willing to provide job specific training to employees already possessing the broad technical experiences in this certificate. Students completing this certificate and a specific CIS degree program will be further prepared for specific employment opportunities.

## Program Requirements

- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107-Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management


## Large Animal Care \& Handling, STC

## Program Code: LAC.S.STC • Credit Hours: 16

## Description

This program is designed to introduce the student to working within the agricultural field and will provide a baseline of business, communication, and animal handling knowledge.

## Career Opportunities

Holders of this certificate may be better able to obtain employment, or increase their status as a Farm Worker, Farm Manager, Feed Store Worker, Farm Bureau Representative, or Farm Banking Assistant.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business
- VET 1120 - Introduction to Large Animal Sciences: Handling \& Husbandry
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.


## Law Enforcement, STC

## Program Code: CJLE.S.STC • Credit Hours: 21

## Description

This certificate prepares students for future training and education in the field of law enforcement. This certificate enhances law enforcement professional skills and knowledge. It may assist the student in performing well in future civil service examinations for employment or promotion.

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice and law enforcement including those in court systems, court administration, law enforcement agencies, private investigation agencies, and probation and parole.

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1105 - Criminal Law
- CJS 1125 - Policing
- CJS 2111 - Ethics \& Professionalism in Criminal Justice


## Linux Security \& Network Essentials, STC

## Program Code: LSNE.S.STC • Credit Hours: 12

## Description

This certificate is an information technology certificate concentrating on teaching specific skills pertaining to the fundamentals of the Linux operating system, Linux security and network and data communications.

## Career Opportunities

Opportunities include Linux administrators and Linux consultants.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2550 - Linux Operating System
- CIS 2640 - Network Security


## Magnetic Resonance Imaging, STC

Program Code: MRI.S.STC • Credit Hours: 5

## Description

The short term certificate in Magnetic Resonance Imaging (MRI) is designed to provide radiographers certified by the American Registry of Radiologic Technologists (ARRT) with didactic and clinical education in Magnetic Resonance Imaging. Didactic courses focus on current MRI principles while clinical courses provide students with real-life experience and development of hands-on skills needed to pursue employment opportunities MRI.

## Career Opportunities

Completion of this short term certificate program can lead to employment in comprehensive hospitals, suburban or rural outpatient centers, surgery centers, etc. as a Magnetic Resonance Imaging Technologist.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- RAT 2643 - Principles of Magnetic Resonance Imaging
- RAT 2645 - Magnetic Resonance Imaging Practicum
- RAT 2645 - Magnetic Resonance Imaging Practicum


## Mammography, STC <br> Program Code: MAMMO.S.STC • Credit Hours: 4-6

## Description

The short term certificate in Mammography is designed to provide radiographers certified by the American Registry of Radiologic Technologists (ARRT) with didactic and clinical education in Mammography. Didactic courses focus on current Mammography principles while clinical courses provide students with real-life experience and development of hands-on skills needed to pursue employment opportunities Mammography.

## Career Opportunities

Completion of this short term certificate program can lead to employment in comprehensive hospitals, suburban or rural outpatient centers, etc. as a Mammographer.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- RAT 2647 - Principles of Mammography
- RAT 2649 - Mammography Practicum


## Manufacturing Management, STC

## Program Code: MM.S.STC • Credit Hours: 18

## Description

This short-term certificate provides a manufacturing specific background in organizations, industrial supervision, improvement techniques, quality, teamwork and cost analysis.

## Career Opportunities

The purpose of this certificate is to assist individuals in their transition from a technical job (engineer, technician, production worker, etc.) to a managerial position (foreman, supervisor, manager, etc.) in the manufacturing industry.

Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1130 - Lean Operations \& Continuous Improvement
- MAN 2110 - Introduction to Project Management


## Mechanical Software Technician, STC

## Program Code: METECH.S.STC • Credit Hours: 16

## Description

The Mechanical Software Technician short term certificate introduces students to the field of mechanical engineering including using the latest versions of computer-aided drafting software. All courses are part of the Mechanical Engineering Technology associate degree.

## Career Opportunities

Professionals with software skills are in demand by mechanical design firms.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 2281 - Engineering Technology Professional Practice
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MET 1151-Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts OR
- MET 2700-Mechanical Engineering Technology Internship


## Mechanical Technician,STC

Program Code: MECHTECH.S.STC • Credit Hours: 20-22

## Description

This program will provide the hands-on skills in mechanical engineering technology and manufacturing to begin entry-level technician jobs, with options open in numerous fields and companies.

## Career Opportunities

The Mechanical Technician certificate introduces students to basic mechanical engineering concepts and prepares them to work as entrylevel technicians in mechanical engineering or related fields.

Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- EET 1120 - Introduction to DC \& AC Circuits
- EGR 1106 - Basic Mechanical \& Electrical Skills
- MET 1111 - Preparatory Math for Engineering Technology
- MET 2151 - Material Science
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics AND
- MET 1401 - Additive Design \& Printing OR
- MET 2281 - Engineering Technology Professional Practice OR
- MET 2700 - Mechanical Engineering Technology Internship OR
- MET 1151 - Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts


## Medical Coding \& Billing Specialist, STC

Program Code: MCBS.S.STC • Credit Hours: 24

## Description

This certificate prepares students for entry-level coding and billing positions in physician medical offices, medical insurance companies and outpatient billing services. Students will develop skills to accurately determine diagnostic and procedural code number assignments that impact medical reimbursement. Skill sets include application of ICD-10-CM, CPT and HCPCS coding systems; medical terminology; anatomy and physiology and disease processes; processing insurance claims and reimbursement practices. The Medical Billing and Coding Specialist certificate can be completed in the traditional classroom setting or completely online or a combination of both delivery systems. Students must receive a grade of C or higher in all courses in the MCBS.STC and have a GPA of 2.0 to receive the certificate.

## Career Opportunities

Employment prospects for medical coding and billing specialists are excellent throughout the nation. Career opportunities include: physician medical offices, medical insurance companies and outpatient billing services.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- HIM 1101 - Medical Terminology
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 2262 - Advanced Medical Office Coding
- MAS 2210 - Medical Billing Specialist


## Micro-Electronics Technician, STC

## Program Code: MICRO.S.STC • Credit Hours 18

## Description

Course work is designed to rapidly prepare the student for the microelectronics workforce. Micro-electronics includes the exciting areas of digital electronics and integrated circuit (IC) chips that control everything from consumer devices, automobiles, medical devices, appliances, sensors, aerospace, industrial controls, and state-of-the-art internet of things (IoT) technology. Technicians will be prepared to enter integrated circuit fabrication and design workforce.

## Career Opportunities

Chip Fabrication technician, micro-controller programming technician, digital electronics technician, technical support technician, field support technician, consultant.

## Program Requirements

- EET 1116 - Electronics Schematics \& Fabrication
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EGR 2205 - Integrated Circuit (IC) Fabrication Techniques
- MAT 1110 - Math for Technologists
- PHY 1106 - Physics for Technology


## Microsoft Certified Solutions Associate, STC

## Program Code: MCSA.S.STC • Credit Hours: 18

## Description

This certificate and the associated courses will help students prepare for the certification exams needed to earn the designation of Microsoft Certified Solutions Associate (MCSA). This credential and the technical competence, as demonstrated by the certification exams, will help students earn employment in the areas of Network Management, Network Administration and System Administration.

## Career Opportunities

Students completing this short term certificate will be prepared for vendor and/or industry certification exams that are highly desired and valued in the Information Technology field. In turn, these certifications will help prepare students for careers in Network Administration, Network Management, System Administration and other aspects of computer and network management.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2640 - Network Security


## Network Engineering Associate, STC

## Program Code: NEA.S.STC • Credit Hours: 17

## Description

This certificate program will provide the student with state-of-the-art networking skills taught via the Cisco Networking Academy curriculum. The curriculum includes all aspects for an introductory network engineering position. This program is designed to provide the knowledge and skills required to understand and participate in basic networking design, installation, configuration and troubleshooting corporate network infrastructure. Included in this program are networking theory, Open Systems Interconnection (OSI) model, networking media, physical and logical design, maintaining networking equipment, designing and implementing internet protocol schemas, the basics of all current internal routing protocols, beginning security information and safety.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as network security analyst, network architect and network engineer.

Program Prerequisite(s)

- CIS 1107 - Introduction to Operating Systems

Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2416 - Routing \& Switching Essentials
- CIS 2421 - Scaling Networks
- CIS 2640 - Network Security


## Network Engineering Entry Level, STC

Program Code: NEEA.S.STC • Credit Hours: 10

## Description

This certificate program will provide the student with networking skills taught via the Cisco Networking Academy curriculum. The Cisco Certified Entry Level Networking Technician (CCENT) designation validates the ability to install, operate and troubleshoot a small enterprise branch network including basic network security. With the CCENT, a networking professional demonstrates the skills required for entry level network support positions. The curriculum covers networking fundamentals, wide area network (WAN) technologies, basic security and wireless concepts, routing and switching fundamentals and configuring simple networks. The CCENT is the first step towards achieving the CCNA designation.

## Program Requirements

- CIS 1107- Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2416 - Routing \& Switching Essentials


## Network Engineering Security Associate, STC

## Program Code: NESA.S.STC • Credit Hours: 16

## Description

This certificate will provide the student with state of the art network security skills taught using the Cisco Networking Academy curriculum. This program is designed to provide the knowledge and skills required to understand basic security threats and to configure and manage Cisco devices to provide appropriate network security. Cisco switches, routers, firewalls and Intrusion Prevention Systems (IPS) methods will be used.

## Career Opportunities

Security analysts plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. They may ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. They may also be involved in the response to computer security breaches and viruses.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2418 - Basic Firewall Security
- CIS 2416 - Routing \& Switching Essentials
- CIS 2640 - Network Security


## New Media, STC

## Program Code: NWMED.S.STC • Credit Hours: 17

## Description

The New Media Short-Term Certificate is designed to cultivate skills in mass communication and message design, visual communication, journalism and marketing within the realm of new technologies including blogs, podcasts, video games, video production, websites, and social media platforms such as Facebook, Instagram, YouTube and Twitter. Students will learn valuable marketing skills, hands on visual communication design, and effective message design in mass communication channels through interdisciplinary theory and methodology. Graduates of the certificate will be able to analyze and assess the needs of a client in order to most effectively communicate and engage with their respective publics.

## Career Opportunities

The New Media Certificate is built to add to the experience of students new to fields of marketing, communication, visual communication and journalism but is also beneficial to those that are currently working in the field and want to update their skill set to include new media techniques.

## Program Requirements

- COM 2201 - Introduction to Mass Communication
- COM 2270 - Communication Internship
- ENG 1101 - English Composition I
- JOU 2101 - Introduction to Journalism
- MRK 2135 - Digital Marketing
- VIS 1140 - Design Processes I


## Nurse Aide, STC

## Program Code: NAST.S.STC • Credit Hours: 4

## Description

Provides education to individuals in the basic skills necessary to provide personal care services and activities under the delegation and supervision of a registered or licensed practical nurse to residents in a long-term care facility.

Chapter 3701-19 of the OAC for the State of Ohio establishes the requirements for Ohio's Nurse Aide Training and Competency Evaluation program. These requirements mandate all NAs working on a regular basis in Ohio's LTCFs must complete an Ohio Department of Health-approved 75 -hour TCEP and pass a competency evaluation test conducted by the director.

## Career Opportunities

Individuals may work as Nurse Aides; Home Health Care Aides or Patient Care Assistants.

Program Requirements

- ALH 1120 - Nurse Aide Training


## Nutrition Associate, STC

Program Code: NA.S.STC • Credit Hours: 4

## Description

Graduates of the certificate program create environments where moments of joy, independence, and wellness are promoted as they assist with preparation of food items and serves food to patients and residents within a scheduled time frame. The Nutrition Associate cleans and maintains food service areas, including kitchen and dining room, assists the Nutrition Director or Dietary Manager and/or cook in maintaining inventory and quality control. Maintains clean, neat and safe work environment. Assures that residents diets are followed. Maintains current sanitation audits and highest standards for kitchen
cleanliness. Assists as a patient or resident assistant when all dietary duties are finished

## Career Opportunities

Career opportunities are abundant in both the Premier and Kettering Health hospital network organizations as well as area long-term care facilities. Nutrition Associates may also pursue employment opportunities in the public school system and correctional facilities.

## Program Requirements

- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems


## Ohio Peace Officer Basic Training Academy, STC

## Program Code: BAS.S.STC•Credit Hours: 26

## Description

This program of study will provide you with the complete Ohio Peace Officer basic officer training required by the State of Ohio for new Ohio law enforcement officers. Taught by state-certified commanders and instructors, the basic academy adheres to the required content, instructional and training standards necessary for individuals to become certified peace officers in the State of Ohio. The basic academy consists of over 700 hours of instruction delivered in 24 weeks of training. The curriculum is intensive and participants must devote significant time and effort to complete the program. Academic, physical fitness, firearms and other demanding skill sets are included in the program. At the conclusion of the training, students are required to take a 200 -question written final exam administered by the Attorney General's Office to receive a certificate of completion. Graduates of this program typically seek employment as police officers, sheriff 's deputies, park rangers or other positions in Ohio which require a law enforcement commission. The Sinclair Academy has placed hundreds of graduates in more than 300 law enforcement agencies in Ohio. Entrance into Sinclair's Criminal Justice Training Academy is a competitive process and not all applicants are accepted. The academy is offered in both the Spring and Summer semesters.

## Career Opportunities

There are openings in local and state law enforcement agencies as well as private investigation and personal protection agencies.

## Program Prerequisite(s)

Physical fitness assessment, fingerprint check, oral interview and college level ready for English.

## Program Requirements

- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II


## Ohio Real Estate Sales Associate, STC

## Program Code: RESS.S.STC • Credit Hours: 9

## Description

This certificate program is designed for the person who is interested in a career in real estate sales. The course work meets the educational requirement of 120 classroom hours for persons to sit for the Ohio real estate license exam: 40 hours of Real Estate Principles and Practices, 40 hours of Real Estate Law, 20 hours of Real Estate Finance, and 20 hours of Real Estate Appraisal. (Further state requirements must also be satisfied). Seat hour requirements of 120 hours are strictly enforced by state rule. Successful completers will receive the Ohio Real Estate Sales Associate Certificate.

## Career Opportunities

The U.S. Bureau of Labor Statistics says "Employment of real estate brokers and sales agents is projected to grow 11 percent from 2012 to 2022, about as fast as the average for all occupations" (Occupational Outlook Handbook).

## Program Requirements

- RES 1101-Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal


## Patient Access \& Scheduling Coordinator, STC

## Program Code: MOR.S.STC • Credit Hours: 14

## Description

This certificate prepares students for entry-level employment in the medical office environment performing scheduling, monitoring patient appointments, out-patient procedures, medical and office equipment maintenance, storing supplies and pharmaceuticals. The program is designed to develop knowledge and understanding of medical language and documentation.

## Career Opportunities

Options for those who complete the certificate include: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMOs), multi-physician group practices and medical specialty clinics.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAS 1110-Administrative Medical Assisting


## Patient Care Technician, STC

## Program Code: PCT.S.STC • Credit Hours: 7

## Description

The Patient Care Technician certificate prepares students to perform the basic skills necessary to provide personal care services and activities under the delegation and supervision of a registered or licensed practical nurse to patients within an acute care facility. Students will be able to demonstrate basic nursing care and the skills required to promote health and healing for patient, as well as implement nursing care that decreases risks and follows safety procedures. Upon completion of ALH 1120 - Nurse Aide Training, students are eligible to sit for the State Test for Nurse Aide Training to become a State Tested Nurse Aide (STNA).

## Career Opportunities

Hospitals; Home Health Aide; Long-term Care Facilities; Rehabilitation Centers.

## Program Requirements

- ALH 1120 - Nurse Aide Training
- ALH 1121 - Acute Care Nurse Aide


## Perioperative Nursing, STC

## Program Code: ORN.S.STC • Credit Hours: 4

## Description

This is an advanced certificate program designed to provide Registered Nurses (RN's), graduate nurses, and nursing students, an introduction to and experiential learning opportunities in perioperative nursing. Students will be exposed to the knowledge and skills required to provide safe, patient-centered care to patients having surgical intervention during the preoperative, intraoperative, and postoperative periods. Upon completion, students will be prepared for an entry-level operating room staff nurse position. Graduates are also eligible to join the Association of PeriOperative Nurses (AORN), and, following two years of operating room experience, may sit for the CNOR exam, an accredited credentialing exam for perioperative registered nurses.

## Career Opportunities

Upon completion, students will be prepared for an entry-level operating room staff nurse position. Graduates are also eligible to join the Association of PeriOperative Nurses (AORN), and, following two years of operating room experience, may sit for the CNOR exam, an accredited credentialing exam for perioperative registered nurses.

## Program Requirements

- SUT 2600 - Fundamentals of Perioperative Nursing


## Pharmacy Technician, STC

Program Code: PHT.S.STC • Credit Hours: 21-23

## Description

This program prepares individuals to perform the technical and specialized skills of a pharmacy technician within retail, mail-order, hospital, nursing homes and home health care settings. The program is designed to develop knowledge and understanding of basic pharmacology, maintenance of patient records, drug-product preparation and distribution and record-keeping. A portion of this program will involve 80 hours of simulated lab and 210 hours of directed practice within a pharmacy. A state and federal background check will be required prior to starting the directed practice. A grade of " C " or better is required in all courses to complete the program. Upon completion of the program students may take the national Pharmacy Technician Certification Board Examination.

## Accreditation

The Pharmacy Technician Program is accredited by the American Society of Health-System Pharmacists/Accreditation Council for Pharmacy Education (ASHP/ACPE).

## Career Opportunities

Pharmacy Technician in retail and mail-order settings, hospital pharmacies, nursing homes and home health care sites.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1122 - Pharmacy Technician I
- ALH 1123 - Pharmacy Technician II
- ALH 1124 - Pharmacy Technician Directed Practice
- ALH 1183 - Pharmacy Technician Lab
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1445 - Quantitative Reasoning OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.

Post Associate Certificate for Engineering University Transfer, STC

Program Code: EUTPG.S.STC • Credit Hours: 16

## Description

The Post Associate Certificate for Engineering University Transfer is designed for students who would like to take additional coursework at Sinclair in preparation to transfer to a four-year university. A minimum of an associate degree is required. Courses used to fulfill the
requirements of the AS degree in Engineering University Transfer cannot be used for this certificate. All students should meet with an academic advisor prior to enrolling in any courses within this certificate.

## Career Opportunities

This certificate is design to help students complete bridge courses before transferring to a four-year university.

## Transferability

All courses within the certificate have been selected for transfer to fouryear institutions.

## Prerequisites

- Students must have completed the Engineering University Transfer associate degree.


## Program Requirements

- Associate of Science Elective $16 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.


## Program Requirements

Choose 16 hours from:

- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2131 - Engineering Digital Design
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1201 - English Composition II
- HIS 1112 - Western Civilization II
- ISE 1100 - Product Development Fundamentals
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- MAT 1450 - Introductory Statistics
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- MAT 2320 - Linear Algebra
- MAT 2330 - Differential Equations \& Linear Algebra
- MAT 2570 - Discrete Mathematics
- MAT 2600 - Applied Statistics
- MEE 2101 - Statics for Engineers
- MEE 2201 - Thermodynamics for Engineers
- MEE 2301 - Strength of Materials for Engineers
- MEE 2401 - Dynamics for Engineers
- MET 1161 - Software Tools for Engineering Technology
- MET 2101 - Thermodynamics
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics
- PHI 2205 - Introduction to Philosophy
- PHI 2206 - Introduction to Ethics
- PHY 2210 - MATLAB for Scientists \& Engineers
- REL 1111 - Eastern Religions
- REL 1112 - Western Religions


## Post Associate Certificate in Interior Design, STC

Program Code: INDPG.S.STC • Credit Hours: 11

## Description

The certificate will provide an introduction to REVIT, construction drawings, materials and application; and kitchen and bath designs to support additional academic requirements to gain eligibility to take the National Council for Interior Design Qualification (NCIDQ) exam.

## Career Opportunities

Students will gain professional status to pursue careers as designers or consultants in design studios, architecture firms or commercial retailers.

## Program Prerequisite(s)

Minimum of an AAS degree in interior design

Program Requirements

- CAT 1121 - Architectural Graphics II
- CAT 2741 - Current Topics in Architecture
- IND 2250-3D Modeling
- IND 2280 - Kitchen \& Bath Design


## Powerplant Aviation Maintenance, STC

## Program Code: PPAM.S.STC • Credit Hours: 19

## Description

The Powerplant Aviation Maintenance certificate provides the knowledge and skills required by the Federal Aviation Administration (FAA) for the powerplant maintenance technician student. Students will learn to apply all the knowledge and skills in the lab portion.

## Career Opportunities

Boeing Commercial Aircraft Company recently predicted 1,000,000 more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next 15-20 years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1128 - Powerplant Safety Systems
- AVT 2122 - Ignition \& Starting
- AVT 2126 - Reciprocating Engines
- AVT 2129 - Propellers
- AVT 2138 - Engine Fuel \& Fuel Metering
- AVT 2219 - Turbine Engines


## Processes for Interior Design, STC

## Program Code: IND.S.STC • Credit Hours: 24

## Description

This certificate provides students with an introduction in the field of interior design. It will include the following introduction to the design process: problem solving techniques, space planning, production selection, ADA compliancy, ergonomics, lighting, color, furniture placement and accessorizing, scaled floor plan, elevation and detail drawings, defining/applying architectural and interior-related materials, estimating/budgeting products, writing specifications; and, presentation skills.

## Career Opportunities

This certificate can provide students an opportunity to support entry level interior design positions. Many opportunities exist in retail stores (paint, flooring, lighting, and furniture), home staging, visual merchandising and as an interior designer's assistant.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2130 - Non-Residential Design
- IND 2140 - Sustainable Design


## Professional Communication, STC

## Program Code: COM.S.STC • Credit Hours: 27

## Description

Communication skills are critically important for everyone. Earning a professional communication certificate can be an important key to career success. Completion of the certificate will demonstrate to current and prospective employers that a student recognizes the importance of various communication skills and strategies in a variety of professional settings. The results of a 2011 survey by the National Association of Colleges and Employers showed verbal communication skills as the number one soft skill that employers sought in new college graduates looking to join their organizations.

## Career Opportunities

A Professional Communication Certificate can provide opportunities in journalism, speech education, business, industry, government, broadcast media, law, ministry, social services, public relations, or provide valuable communication skills to enrich any career. Enhancing communication skills provides invaluable benefits for all students, regardless of major or career path.

## Program Requirements

- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2220 - Introduction to Communication Theory
- COM 2225 - Small Group Communication
- COM 2230 - Nonverbal Communication
- COM 2245 - Intercultural Communication
- COM 2235 - Principles of Interviewing OR
- COM 2287 - Effective Listening
- COM 2285 - Organizational Communication OR
- COM 2286 - Public Relations Principles


## Professional Firefighter, STC

## Program Code: PFC.S.STC • Credit Hours: 12

## Description

Provides training for full-time, part-time and volunteer firefighters to obtain the certifications necessary to meet the requirements of the National Fire Protection Association Standard 1001, Firefighter I and II. State of Ohio Certification from the Ohio Department of Public Safety and National Board on Fire Service Professional Qualifications.

## Accreditation

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Career Opportunities

Professional firefighter in the State of Ohio.

## Program Prerequisite(s)

Must have a valid motor vehicle operator's license

## Program Requirements

- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Professional Writing, STC

## Program Code: PRW.S.STC • Credit Hours: 18

## Description

The Professional Writing Certificate offers appropriate courses for students and professionals interested in improving their writing, editing and computer skills for a future in professional writing or to enhance their marketability. The certificate is especially useful for those in professional and administrative positions in business, hospitality, health and human services.

## Career Opportunities

The Professional Writing Short Term Certificate is a valuable addition to many, if not all, majors at Sinclair. Students completing this certificate will learn writing and communication techniques essential in the workplace. Top jobs for students earning this certificate are in the copywriting, marketing, finance, grant, hospitality, legal, technical, health and business fields. Current research indicates that employers seek candidates who have expertise in writing in a professional setting, and students completing this certificate will acquire a facility with writing and language use in that environment.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1220 - Word Processing Software
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENG 1199- Textual Editing
- ENG 2257 - Creative Writing: Nonfiction OR
- JOU 2101 - Introduction to Journalism


## Public Service Support, STC

## Program Code: SWA.S.STC • Credit Hours: 24

## Description

The Public Service Support certificate is the first of three core certifications of the proposed Community \& Public Services Associate of Applied Science. Students learn how to provide assistance to Social Work and Social Service Professionals in the field. This certificate includes course work in the fields of sociology, psychology, social work, and human services and behavioral health and is designed to prepare students to work in the helping profession at an entry level position. This certificate prepares students to work with those in need
to overcome difficulties and improve their lives. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.

## Career Opportunities

The Public Service Support certificate is employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve their degree in the Community \& Public Service AAS or their AA degree in Social Work, with additional coursework.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 2130 - Sociology of Family Violence
- SWK 1206 - Introduction to Social Work
- OT36 Arts and Humanities $\mathbf{3}$ Cr. Hr.(s)

Public Services Assistant, STC

Program Code: SSA.S.STC • Credit Hours: 20-21

## Description

The Public Services Assistant certificate is designed to provide the tools needed for employment with human service agencies emphasizing the skills of: communication, critical analysis of social problems, mediation, and investigative techniques. The inclusion of Mental Health Technology 1130, Introduction to Addictive Illness, provides an opportunity for the student to secure a Chemical Dependency Certified Assistant Certificate after state mandated criteria is met.

## Career Opportunities

The Public Service Assistant certificate is designed to provide the tools needed for employment with human service agencies.

Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1106-Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2145 - Correctional Case Management OR
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary OR
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- CJS 1165 - Corrections OR
- SOC 2205 - Social Problems OR
- SOC 2130 - Sociology of Family Violence


## Radio Frequency Identification (RFID), STC

Program Code: RFID.S.STC • Credit Hours: 6-7

## Description

This program is an introduction to the basics of Radio Frequency Identification (RFID) principles with a business or engineering technology orientation. Various RFID technologies, RFID project planning and implementation of basic business solutions or RFID hardware setup, maintenance and troubleshooting will be covered. Emphasis is on a team approach to management and technology aspects of design and implementation of a basic system.

## Career Opportunities

There is an ever-increasing use and adaptation of RFID technology in business, manufacturing and the defense industry.

## Program Requirements

- EET 2257 - Radio Frequency Identification (RFID) Capstone
- MAN 1157 - Management Applications of Radio Frequency Identification Technology OR
- EET 2157 - Radio Frequency Identification (RFID) Technology
- MAN 1106 - Introduction to Radio Frequency Identification


## Re-Entry Preparation, STC

## Program Code: REP.S.STC • Credit Hours: 12

## Description

The Re-entry Preparation Certificate is a one semester certificate that provides students with the minimum tools needed to reintegrate back into society. This certificate will focus on developing entry level computer skills, interpersonal communication, and the creation of a personal portfolio highlighting the education and skills obtained during incarceration.

## Career Opportunities

Students will obtain the basic skills needed to reintegrate back into society. Career opportunities include entry level occupations in all fields of labor. In many cases, students have gained viable vocational skills while incarcerated but are unable to successfully re-enter society because they lack basic computer skills and are unable to effectively create a personal portfolio to highlight those skills. This certificate will focus on developing basic level computer skills, interpersonal communication and the creation of a personal portfolio highlighting the education and skills obtained during incarceration.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary OR
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology


## Real Estate Sales Professional, STC

Program Code: RESPROF.S.STC • Credit Hours: 18

## Description

This certificate is designed for the person who is interested in a career in real estate sales. The program includes the educational requirement for persons to sit for the Ohio real estate license exam: 40 hours of Real Estate Principles and Practices, 40 hours of Real Estate Law, 20 hours of Real Estate Finance, and 20 hours of Real Estate Appraisal. Students will also learn effective communication skills and how to use office applications.

## Career Opportunities

A career in real estate can be very rewarding. The U.S. Bureau of Labor Statistics says "Employment of real estate brokers and sales agents is projected to grow 7 percent from 2018 to 2028, about as fast as the average for all occupations" (Occupational Outlook Handbook). Additional careers include positions as title officers and examiners, property managers, and loan officers.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- RES 1101 - Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal


## Reimbursement Analyst, STC

## Program Code: RMS.S.STC • Credit Hours: 19

## Description

The Reimbursement Analyst short-term certificate prepares students to work in a billing office for medical providers. The certificate will focus on preparing students to take the national certification examination to earn the credential Certified Medical Reimbursement Specialist (CMRS) offered by the American Medical Billing Association (AMBA). Students will be expected to complete a practicum experience to obtain this certificate, gaining work and hands-on medical billing skills.

## Career Opportunities

The Reimbursement Analyst short-term certificate prepares students to work in a billing office for medical providers. The certificate will focus on preparing students to take the national certification examination to earn the credential Certified Medical Reimbursement Specialist (CMRS) offered by the American Medical Billing Association (AMBA).

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1130 - Reimbursement Specialist Practicum
- MAS 2210 - Medical Billing Specialist
- MAT 1130 - Mathematics in Health Sciences


## Respiratory Care of the Newborn, STC

Program Code: RCN.S.STC • Credit Hours: 4

## Description

Provides education to respiratory care practitioners to be oriented to neonatal respiratory care including history, fetal development, stabilization, evidence-based practices, and multi-disciplinary approaches. Includes respiratory devices employed for ongoing support of term and pre-term infants. Graduates will have a better knowledge of newborn resuscitation and stabilization. Student must be a licensed respiratory therapist.

## Career Opportunities

Graduates will have a better knowledge of respiratory care skills and pertinent information needed for newborn resuscitation and stabilization.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- RET 2301 - Respiratory Care of the Newborn I
- RET 2302 - Respiratory Care of the Newborn II
- RET 2303 - Respiratory Care of the Newborn III

Retail Business, STC

## Program Code: RTB.S.STC • Credit Hours: 12

## Description

The Retail Business short-term certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to further build and develop their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

Individuals who complete this certificate will have gained further knowledge and skills that are crucial to being a successful supervisor. This certificate is the second step in the Retail Management Certificate which is designed to give incumbent retail workers the knowledge and skills required to be eligible for a promotion or raise within their current organization.

## Program Requirements

- ACC 1100 - Survey of Accounting
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- MRK 2100 - Foundations of Marketing


## Retail Management, STC

Program Code: RMC.S.STC • Credit Hours: 24

## Description

The Retail Management certificate is a business program where students learn the key skills needed for retail management success. The Retail Management certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to further build and
develop their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

The Retail Management Certificate program was created by experts in the industry to provide relevant knowledge and skills to their workforce. This program has successfully prepared nearly 2,000 graduates for management positions. Employees and employers benefit directly from the higher level of self-confidence and engagement displayed by graduates.

Recently recognized by the White House as part of the Upskill Initiative, the certificate is currently available in a variety of formats including face-to-face, on-line, and in a competency-based model.

The certificate program was established under the direction of the Western Association of Food Chains which includes many of today's leading retailers and wholesalers, and $7,500+$ supermarkets. The program also has endorsement from leading organizations including Food Marketing Institute (FMI) and National Grocers Association (NGA). Most recently, the Retail Management Certificate has gained recognition from highly respected entities such as the ACT Foundation, and the U.S. Department of Labor.

## Program Requirements

- ACC 1100 - Survey of Accounting
- BIS 1120 - Introduction to Software Applications
- ENG 1131 - Business Writing
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- MAN 2275 - Retail Management Capstone
- MRK 2100 - Foundations of Marketing


## RN Scrub, STC

## Program Code: SRN.S.STC • Credit Hours: 1

## Description

This advanced short-term certificate is designed to provide Registered Nurses, who specialize in Perioperative Nursing, the opportunity to learn the technical skills required to perform in the role of the Scrub during surgical intervention. Students will be exposed to the knowledge and skills required to provide assistance to the surgeon performing surgical intervention during the intraoperative period.

## Career Opportunities

RN graduates of this short term certificate will be able to increase their role versatility in any facility in which surgical intervention takes place. Many students will already be employed in a surgical facility and completion will allow them to perform in the role of the Circulator or Scrub.

## Program Prerequisite(s)

Approval of Department

Program Requirements

- SUT 2500 - RN Scrub


## Small Business Management, STC

## Program Code: SBM.S.STC • Credit Hours: 18

## Description

This certificate prepares existing or potential entrepreneurs in a variety of small business functions.

## Career Opportunities

Students completing this certificate can expect to be prepared for a management role in an existing small business or begin their own small business.

## Program Requirements

- ACC 1100 - Survey of Accounting
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MRK 2220 - Small Business Marketing


## Social Service, STC

Program Code: SOCS.S.STC • Credit Hours: 26

## Description

The Social Service Short-Term Certificate is designed to provide the tools needed for employees and volunteer leaders related to human service agencies and nonprofit organizations emphasizing the skills of: communication, critical analysis of social problems, investigative techniques, an understanding of the bureaucratic social and legal system serving the community and the role of the volunteer.

## Career Opportunities

This certificate enhances careers in sociology, social work, education, government, health care, public safety, human services, nonprofit organizations and related fields.

## Program Requirements

- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 2138 - Ethical Issues in the Helping Professions
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work


## Software Applications for the Professional, STC

## Program Code: SA.S.STC • Credit Hours: 18

## Description

This certificate provides office staff, managers, professionals and anyone interested in learning software applications and integration with the skills they need for their job. Students will have the opportunity to develop and refine their skills in a variety of current software used in today's work environments.

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities, to name a few.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1260 - Database Software


## Sports Nutrition Specialist, STC

Program Code: SNS.S.STC • Credit Hours: 6

## Description

The sports nutrition specialist is equipped with the knowledge of evidence-based nutrition principles that include Dietary Guidelines for Americans, Dietary Reference Intakes, USDA Nutrition Guidelines, FDA Nutrition Guidelines, CDC Nutritional Guidelines, MyPlate, National Fruit \& Vegetable Consumption Coalition, and the Academy of Nutrition and Dietetics general nutrition guidelines and position papers. The sports nutrition specialist is trained to identify nutritionrelated acute and chronic illness as well as disordered eating practices that can then be referred to a nutrition professional. Knowledge of macronutrients and their relationship with exercise and performance are provided. Ergogenic aids, supplements, and fad diets are reviewed for efficacy. The sports nutrition specialist certificate, in conjunction with an accredited personal training credential provides the nutrition knowledge for the trainer to provide general evidence-based nutrition principles to a healthy population as it applies to exercise and performance.

## Career Opportunities

The Sports Nutrition Specialist certificate will provide a sports nutrition skill set that can be utilized in the Personal Training and Health Coaching workforce.

## Program Requirements

- DIT 1525 - Human Nutrition
- DIT 1825 - Nutrition for Exercise \& Sport Science


## Supervision Foundations, STC

## Program Code: SFD.S.STC • Credit Hours: 9

## Description

The Supervision Foundations short-term certificate gives students the basic tools needed to be a successful supervisor in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to begin building their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

Students completing this short-term certificate can continue with the Retail Management certificate program and be positioned for a promotion or raise in their current position.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- MAN 2101 - Introduction to Supervision


## Supervisory Skills, STC

## Program Code: BSP.S.STC • Credit Hours: 21

## Description

The Supervisory Skills certificate is useful to students who need to understand the foundation of supervision, no matter in which discipline they formally study. Engineers, business managers, architects, educators, and many other professionals need to understand how to better supervise employees. This certificate includes coursework that is foundational to understanding business and personnel concepts that will benefit supervisors in any capacity. This certificate is most useful for those who are new to supervision or to those who desire to become supervisors.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2160 - Principles of Macroeconomics OR
- ECO 2180 - Principles of Microeconomics
- LAW 1101 - Business Law
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MRK 2101 - Principles of Marketing Management


## Surgical Instrument Technician, STC

## Program Code: SPT.S.STC • Credit Hours: 13

## Description

The Surgical Instrument Technician short-term certificate program will prepare the graduate to work within a health-care facility to ensure medical and surgical supplies, instruments, and equipment are properly cleaned, prepared, processed, stored, and distributed for patient care and surgical use. Knowledge of basic human anatomy, medical terminology, and a combination of sterilization, inventory control, and information technologies are integrated into the curriculum to ensure a safe outcome for all patients. This program combines both lecture, lab, and a practicum to prepare the Sterile Processing Technician student to take the CRCST Exam upon graduation and upon completion of 400 work related hours in a Sterile Processing Department. Hours attained during practicum count as credit toward the 400 work related hours required for CRCST Exam eligibility. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll. A grade of C or higher is required in all courses.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- HIM 1101 - Medical Terminology
- SUT 1100 - Sterile Processing I
- SUT 1200 - Sterile Processing II
- SUT 1207 - Practicum for Sterile Processing II


## Tartan TOPS Program, STC

Program Code: CTP.S.STC • Credit Hours: 25

## Description

The Tartan TOPS Program (Transition Options in Postsecondary Education) provides and educational/career pathway for students aged 18-24 who have an intellectual disability. This certificate program is a meaningful, academic credential that provides students with the necessary educational supports to learn life and work skills at the postsecondary level. The program uses embedded tutors in inclusive academic classes and provides students with internship opportunities in inclusive work and class-based settings While the first two semesters equip students with the academic skills needed to succeed in a post-
secondary environment (including socially), the last two semesters provide the training and employment resources needed for students to become self-sufficient in the workplace and obtain competitive employment. Sinclair is committed to the values of community inclusion and self-determination and promotes the pursuit of postsecondary options that include academic enrichment, competitive employment, social engagement, and independent living for individuals with intellectual disabilities.

## Program Requirements

- COM 2206 - Interpersonal Communication
- SCC 1100 - Life Skills I
- SCC 1200 - Life Skills II
- SCC 1300 - Work Skills I
- SCC 1400 - Work Skills II
- SCC 2100 - Inclusive Internship

Any Course in Catalog 3 Cr. $\mathbf{H r}$.(s)

## Tax Practitioner, STC

## Program Code: TAXP.S.STC • Credit Hours: 15

## Description

The Tax Practitioner certificate prepares students for work in the tax preparation field. As tax law changes and grows more complex, more people seek professional tax preparation assistance. The Tax Practitioner certificate covers federal, state and local tax law. The Tax Practitioner certificate will prepare students for the Registered Tax Preparer Exam that the Internal Revenue Service is instituted with the 2012 tax season.

## Career Opportunities

Tax preparers may work as employees for companies or work as an independent tax preparer.

Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- ACC 1510 - Computerized Accounting Systems
- ACC 2321 - Federal Taxation
- ACC 2322 - Advanced Taxation

Tissue Banking Technology, STC

## Program Code: TBT.S.STC • Credit Hours: 12

## Description

The Tissue Banking Technology certificate program prepares individuals to attain the skills necessary to become a certified tissue banking technologist. Tissue banking technologists are integral in the
recovery, processing, storage and distribution of human tissue. Students in this program will gain basic knowledge of human anatomy, medical terminology, sterile techniques, surgical recovery and processing techniques, and all ethical and regulatory standards related to the field of Tissue Banking.

## Career Opportunities

Careers in Tissue Banking Technology are growing both locally and nationally, as interest in new graft technology continues to rise. Locally, CBCCTS has expanded its operations and opened a new processing facility that will increase current processing capacity by 40\%.

## Program Prerequisite(s)

## Restricted to Majors

## Program Requirements

- BIO 1107 - Human Biology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1110 - Math for Technologists
- SUT 1101 - Tissue Banking I
- SUT 1107 - Lab for Tissue Banking I
- SUT 2101 - Tissue Banking II
- SUT 2107 - Practicum for Tissue Banking II


## Trauma Informed Care in Education, STC

Program Code: EDU.S.STC • Credit Hours: 12

## Description

Trauma Informed Care in Education is a four-course certificate that provides students a foundational understanding of trauma effects on the brain, culturally sensitive approaches, and resources to equip educators in a trauma-informed classroom.

## Career Opportunities

This certificate will provide an overview of how adverse childhood experiences impact child development, social emotional development, and how early childhood trauma impacts brain development. The content of the courses in this certificate will aid teachers in preschool through grade 12 in assessing and addressing the needs of children who have experienced trauma and will provide strategies to develop a trauma-sensitive classroom environment. Additionally, the certificate will examine historical and current racial, ethnic, gender, sexual orientation, linguistic, and social class stereotypes and biases as related to youth in the United States and globally.

## Program Requirements

- EDU 2101 - Introduction to Early Childhood Trauma
- EDU 2102 - Understanding the Brain \& Trauma
- EDU 2103 - Trauma-Informed Classrooms
- SOC 2210-Cultural Humility for Working with Youth


## UAS First Responders, STC

## Program Code: UASFR.S.STC • Credit Hours: 16

## Description

The UAS First Responders Short-Term Technical certificate prepares students for entry level positions in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge, skills and proficiency in UAS theory, capabilities and scenario based objectives related to the first responder industry.

## Career Opportunities

The demand for Unmanned Aerial Systems is increasing at a phenomenal rate. A shift in military strategies and the demand for use in the private sector as well as other government agencies has fueled an industry which is estimated to explode to over $\$ 80$ billion in the next decade. With local government agencies and First Responder personnel in need of new technological options for fast and safe mission execution. The Dayton region and its Educational Institutions are primed to take advantage of the opportunity as industry leaders.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1108 - UAS First Responder Applications
- AVT 2150 - Crew Resource Management for UAS
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1155 - Homeland Security Issues \& Administration
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory


## UAS for Geographic Information Systems, STC

## Program Code: UASGIS.S.STC • Credit Hours: 16

## Description

The UAS for GIS (Geographic Information Systems) Short-Term Technical certificate prepares students for entry level positions as GIS analysts in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge and skills involving GIS technologies and UAS technology.

## Career Opportunities

The Unmanned Aerial System platform capabilities include but are not limited to aerial mapping and remote sensing for geographic information systems. The private sector as well as governmental demands for Unmanned Aerial System personnel in geospatial information and remote sensing applications are in high demand.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1114 - Geospatial Information for UAS
- AVT 2150 - Crew Resource Management for UAS
- CAT 1501 - Fundamentals of Surveying \& Mapping
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- GEO 1107 - Introduction to Geographic Information Systems (GIS)


## UAS Precision Agriculture, STC

## Program Code: UASAG.S.STC • Credit Hours: 16

## Description

The UAS Precision Agriculture Short-Term Technical Certificate prepares students for entry level positions in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge and skills involving Precision Agriculture and UAS Technology.

## Career Opportunities

Precision Agriculture is expected to be $80 \%$ of the UAS market over the next decade. Industry projections and demands indicate that the UAS precision agriculture market will be one of the five industries that benefit first from FAA rules and regulation changes. With agriculture being the number one industry in the state of Ohio and contributing 107 billion dollars a year to the Ohio economy. Agricultural industry needs in drought management, disease detection, watering, and spraying pesticides make UAS an intelligent and affordable option.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1200 - Agricultural Economics
- AGR 1300 - Agronomy
- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1112 - UAS Precision Agriculture
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization


## Veterinary Assistant, STC

## Program Code: VET.S.STC Credit Hours: 19

## Description

This certificate program will prepare the student to work within the veterinary hospital, assisting the veterinary technician (nurse) and veterinarian (doctor) with animal care by learning and practicing professionalism, client service, animal behavior and restraint, medical
assisting, laboratory protocols and collection and preparation of samples, surgical suite care and preparation of animals, and anesthetic monitoring for the stable patient. Students will be offered the opportunity to become Fear Free (R) certified during this program. This certificate will focus on the care of small animals (dogs and cats), but students interested in large animal or exotic animal care may be able to be placed in a suitable clinic in which to gain that experience.

## Career Opportunities

A Veterinary Assistant is a vital member of the medical/patient-care team in a veterinary hospital. Veterinary Assistants do not need to be certified in the state of Ohio in order to work in a veterinary practice, but this program is designed to create a professional, well-trained, experienced employee who will be able to fit into a variety of practices. The veterinary profession lacks sufficient paraprofessionals in this region, the state of Ohio, and the nation - additional trained staff can help to alleviate the stress on current workers. Veterinary assistants are also valuable in other animal-related fields, such as kennel-worker, groom, animal trainer, and animal care-giver (petsitter).

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- VET 1102 - Introduction to Veterinary Technology I
- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2107 - Technical Practicum I OR
- VET 2108 - Veterinary Assistant Technical Practicum


## Video Production, STC

Program Code: VID.S.STC • Credit Hours: 22

## Description

This certificate introduces students to the basics of video production, including lighting \& cinematography and audio production. Students will learn the design process, appropriate applications and video and audio equipment to create quality videos.

## Career Opportunities

There are several positions to fill in the digital video production profession. You could work in television, advertising, or news reporting. You also could apply your skills in education, government, or business industries. Within these settings, you could hold entry-level positions in a variety of positions, such as a video editor, camera operator, audio editor, or live stream operator. As well, there are freelance opportunities.

- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design


## Web Design, STC

## Program Code: WEB.S.STC • Credit Hours: 21

## Description

This short-term certificate introduces students to the basics of web coding and design, including conceptualizing, designing, developing, and maintaining websites. Students will learn a variety of web design concepts and digital design applications.

## Career Opportunities

Students successfully completing this short-term certificate will have the necessary skills to apply for entry level work in the field of web design and development for businesses, government and design agencies.

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design


## Web Programming, STC

Program Code: WW1.S.STC • Credit Hours: 18

## Description

The Web Programming certificate is designed to provide an individual with current web development skills. It focuses on techniques for developing web-based distributed applications using standard languages and protocols such as HTML, JavaScript, CSS, XML, PHP and ASP.NET. It is designed for experienced software developers to update their skills and for individuals wishing to make a career change into the Information Technology field. The certificate focuses on web application development in a client/server networked environment.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts and network engineers.

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2212 - Java Software Development I
- CIS 2222 - ASP.NET with C\#
- CIS 2250 - Web Site Development with php


## Welding and Metal Joining, STC

## Program Code: CAMWM.S.STC • Credit Hours: 18

## Description

This certificate in welding and metal joining contains in-depth handson labs which will include MIG, TIG, Stick (ARC), and Ox-acetylene use along with other types of metal joining options and instruction to include sheet metal layout, shearing, bending, riveting, brazing and spot welding. Welding safety, personal protection equipment, and special welding tools will be taught in-depth and used by the students within the lab setting. The other courses within the certificate offer an introduction to the manufacturing processes used in the tooling, machining, the welding industry, a focus on blueprint reading, design using AutoCAD, various measurement techniques and the mathematics necessary to solve applications in welding and manufacturing technology.

## Career Opportunities

This in-depth training will ready students for entry level positions in Machine repair, Die and Mold repair, Metal Fabrication, Tool and Die shops, general repair shops and general manufacturing.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1180 - Welding \& Metal Joining I
- CAM 1181 - Welding \& Metal Joining II
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Workforce Readiness, STC

## Program Code: WFR.S.STC • Credit Hours: 6

## Description

The Workforce Readiness certificate will provide students skills to help returning citizens overcome reentry and employment barriers. .

## Career Opportunities

This certificate will start students on the path of workforce readiness.

- BIS 1400 - Customer Service
- CJS 1106-Transition Skills


## Associate of Individualized Study

## Associate of Individualized Study, AIS

## Program Code: AIS.S.AIS • Credit Hours: 60

## Description

The Associate of Individualized Study (AIS) degree is open to any student who wishes to design an interdisciplinary degree program using liberal arts or combining liberal arts with technical areas of study. As an alternative, part of the student's degree requirements may incorporate credit awarded through articulation agreements with community education providers or a combination of both. The student may focus specifically on education for individual development and enrichment or may design a curriculum that allows for employment or continuation into selected four-year degree programs. Note: This program requires an approved AIS application. Please contact plaprograms@sinclair.edu to complete the process. When applying for admission to Sinclair, select the Associate of Arts (LA.S.AA) degree. Upon your AIS application being approved, you will be moved into this program of study.

## General Education

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.

Two of the following three areas required to total 6 semester hours

- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural and Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- AIS Concentration $30 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- AIS Related Electives 15 Cr . $\mathrm{Hr}(\mathbf{s})$.


## Associate of Technical Study

## Associate of Technical Study, ATS

Program Code: ATS.S.ATS • Credit Hours: 60

## Description

The Associate of Technical Study (ATS) degree is open to any student whose technical degree goals cannot be accomplished through enrollment in one of Sinclair's existing technical degree programs. The student may design a degree which combines two or more technical areas into a unique education plan. As an alternative, part of the student's degree requirements may incorporate credit awarded through articulation agreements with community education providers, or a combination of both. In all cases, faculty members assist the student in
planning the most appropriate course of study for the individual. Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu to complete the process. When applying for admission to Sinclair, select the Associate of Arts (LA.S.AA) degree. Upon your ATS application being approved, you will be moved into this program of study.

## General Education

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.

Two of the following three areas required to total 6 semester hours

- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural and Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective 3 Cr. Hr(s).
- ATS Concentration $30 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- ATS Related Electives 15 Cr . $\mathrm{Hr}(\mathrm{s})$.


## Criminal Justice/OPOTA, ATS

Program Code: CJS.S.ATS • Credit Hours: 62

## Description

The Associate of Technical Study Degree in Criminal Justice/OPOTA prepares entry-level professionals from diverse backgrounds in theoretical foundations, knowledge, skills, and practices of law enforcement operations. This study enables students to develop rational decisions and informed responses to challenges facing law enforcement and CJ professionals today and prepares them to take the OPOTA certification assessment which allows them to seek employment as a Peace Officer in the State of Ohio.

Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu if interested. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Deputy Sheriff, Police Officer, Park Ranger, College or University Sworn Officer

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- COM 2245 - Intercultural Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective - $\mathbf{3}$ Cr. Hr.(s)
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology
- OT36 Arts and Humanities $\mathbf{3 ~ C r}$. Hr.(s)
- Choose one CJS elective - $\mathbf{3}$ Cr. Hr.(s)

CJS Elective

- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 1155 - Homeland Security Issues \& Administration
- CJS 1165 - Corrections
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer Academy
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2270 - Criminal Justice Science Internship
- CJS 2295 - Criminal Justice Science Seminar


## Firefighter EMT, ATS

## Program Code: FST.S.ATS • Credit Hours: 61

## Description

The Associate of Technical Study degree includes training by the Ohio Division of Emergency Medical Services (state accrediting body) for Firefighter I, Firefighter II, Emergency Medical Technician (EMT) and the option of including Fire Inspector and HAZWOPER Technician. Sinclair College complies with all requirements as outlined by the Ohio Division of Emergency Services. Successful students will be eligible to sit for state certification testing and become licensed/certified Firefighter I, Firefighter II, EMT, Fire Inspector and HAZWOPER Technician. Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu if interested. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Students completing this program will find career opportunities in fire departments, private ambulance services, hospitals, inspection companies, and fire or emergency medical services contractor.

## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- ENG 1101 - English Composition I
- FST 1120 - Fire Safety Inspector
- FST 1125 - Fire Investigation I
- FST 1403 - Live Fire Instructor
- FST 1442 - Emergency Vehicle Operator
- FST 2209 - Fire Service Instructor
- FST 2251 - Fire Officer I
- FST 2270 - Fire Science Internship
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition OR
- FST 1104 - Firefighter II
- OT36 Arts and Humanities Elective - $\mathbf{3}$ Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective - 3 Cr. Hr.(s)
- MAT 1120 - Business Mathematics OR
- MAT 1130-Mathematics in Health Sciences OR
- OT36 Mathematics Elective - $\mathbf{3}$ Cr. Hr.(s)


## Bachelor of Applied Science

## Aviation Technology/Professional Pilot, BAS

## Program Code: AVTP.S.BAS Credit Hours 123-126

## Description

The Bachelor of Applied Science (BAS) degree in Aviation Technology/Professional Pilot is designed to enhance the technical skills of students who have earned an associate degree in Aviation Technology/Professional Pilot at Sinclair Community College, or who wish to pursue a complete bachelors degree. Students may choose fixed wing (single engine and multi-engine) or helicopter pilot certifications. The curriculum in the Professional Pilot program is rigorous and is designed for full time students to complete in 8 semesters. Students must maintain a minimum of a 2.5 GPA . Enrollment in the flight lab courses is limited and priority will be given to full time, degree seeking students. Part time students will be admitted on a space available basis. The student must obtain a Federal Aviation Administration (FAA) 2nd class medical certificate prior to enrolling in any of the flight labs. In addition to standard tuition fees there are additional course and lab fees for each of the flight labs in the program. The flight lab fees are structured to cover the costs associated with the minimum flying hours required for each FAA certificate. Any additional flying time costs
beyond the FAA minimums covered by the flight lab fee must be borne by the student. See the Department for the latest course and flight lab fee costs.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu..

## Career Opportunities

Career opportunities are available in airline, corporate and general aviation. Projected overall employment growth of airline and commercial pilots from 2014 to 2024 is $5 \%$ with $10 \%$ projected employment growth of commercial pilots from 2014 to 2024, faster than the average for all occupations. Expected job growth of 2,337 jobs in Nonscheduled Air Transportation within this sector (20122022). Five of the 25 most concentrated occupations in Aerospace require a bachelor's degree at entry.

## Program Requirements

- AVT 1105 - Orientation to Aviation
- AVT 1110 - Private Pilot Ground School AND
- AVT 1124 - Private Pilot Flight Lab - Airplane Single Engine AND
- AVT 1170 - Instrument Pilot Ground School AND
- AVT 1224 - Instrument Pilot Flight Lab - Airplane Single Engine AND
- AVT 2250 - Commercial Pilot Ground AND
- AVT 2263 - Commercial Pilot Flight Lab - Airplane Single Engine AND
- AVT 2269 - Flight Instructor Flight Lab - Airplane Single Engine OR
- AVT 1111 - Helicopter Private Pilot Ground AND
- AVT 1126 - Private Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 1171 - Helicopter Instrument Pilot Ground AND
- AVT 1226 - Instrument Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2251 - Helicopter Commercial Pilot Ground AND
- AVT 2265-Commercial Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2271 - Flight Instructor Flight Lab - Rotorcraft Helicopter
- AVT 1119 - Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1245-Aviation Law
- AVT 1254 - Flight Simulator Instruction
- AVT 2125 - Developments in Aviation I
- AVT 2146 - Introduction to Airline Operations
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2211 - Advanced Navigation Science
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2247 - Aerodynamics \& Flight Mechanics I
- AVT 2258 - Flight Instructor Ground
- AVT 2266 - Multi Engine Flight Lab AND
- AVT 2275 - Instrument Flight Instructor Ground AND
- AVT 2277 - Instrument Flight Instructor Flight Lab Airplane Single Engine OR
- AVT 2275 - Instrument Flight Instructor Ground AND
- AVT 2278 - Instrument Flight Instructor Flight Lab Rotorcraft Helicopter
- AVT 2700 - Aviation Internship
- AVT 3125 - Developments in Aviation II
- AVT 3150 - Crew Resource Management
- AVT 3241 - Aircraft Systems
- AVT 3242 - Aircraft Accident Investigation II
- AVT 3247 - Aerodynamics \& Flight Mechanics II
- AVT 3300 - Artificial Intelligence (AI) in Aviation OR
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 4146 - Advanced Airline Operations \& Training
- AVT 4154 - Advanced Flight Simulator Instruction
- AVT 4160 - System Safety in Aviation
- AVT 4170 - Airport Operations
- AVT 4290 - Aviation Senior Capstone Project
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580-Precalculus
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts and Humanities Elective (at least two disciplines) $6 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- OT36 Social and Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II

Integrated Systems Technician, BAS

## Program Code: IST.S.BAS • Credit Hours: 120-121

## Description

The Bachelor of Applied Science Integrated Systems Technician program is ideally suited to address present and future needs in manufacturing and other industries. The program focuses on training individuals in technologies related to connected devices, particularly in industrial settings. Graduates will gain the technical and robotic skills needed to effectively integrate new devices into an existing technology infrastructure, and just as critically, will gain the skills to do so in a secure way (Cyber). The program is especially well-suited to those interested in pursuing careers as mechatronics engineering
technologists, who use their combined computer science and engineering skills to work with smart technologies such as robots and manufacturing equipment. The Integrated Systems Technician will be able to understand and service/maintain Advanced Manufacturing, High Tech Warehousing, Smart Consumer Devices, Household Appliances, Automotive computer systems, and Medical Devices through the process of automation and data acquisition, providing cybersecurity, movement of data to the cloud, provide data analytics/visualization and eventually to support the business systems where intelligent decisions can be made.

## Career Opportunities

Careers this degree serves include consumer markets, medical devices, defense industry, industrial high tech manufacturing automation \& warehousing/logistics, and the robotics industry. Multiple regional employers have indicated that this is a growing need for them as they deploy more interconnected devices in advanced manufacturing, warehousing, and production. Per EMSI, the number of monthly postings seeking applicants with expertise in the greater Dayton area has grown steadily and rapidly, from 35 in September of 2016 to 249 in May of 2021. Cyber technician specializing in the micro-controller consumer markets of automotive, appliances, medical devices, defense industry, industrial high tech manufacturing automation \& warehousing/logistics, and the robotics industry. Graduates will be able to work in all areas having to do with the Internet-of-Things, from programming to engineering hardware installations, networking, security, troubleshooting and repair. 60 percent of these regionally posted IOT jobs require a bachelor's degree.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals OR
- CIS 1411 - Introduction to Networks
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2428 - IoT Architecture
- CIS 2545 - Cloud Infrastructure
- CIS 2640 - Network Security
- CIS 4101 - Advanced IoT
- CIS 4102 - Cloud Native \& IoT
- CIS 4178 - Integrated Systems Technician Advanced Capstone IoT Clients OR
- CIS 4170 - Integrated Support Technician Internship
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1105 - Soldering Fundamentals
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2202 - Introduction to Communications Principles
- EGR 2252 - Teach Pendant Robot Programming
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- EGR 3303 - Advanced Programmable Logic Controllers II
- EGR 4101 - Modern Communication Systems
- EGR 4120 - Advanced Microprocessors
- EGR 4150 - Modern Robotics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence
- OT36 Social \& Behavioral Sciences Elective (must be from two discplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (must be from two discplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II


## Nursing, BSN

## Program Code: NUR.S.BSN • Credit Hours: 120-121

## Description

The Bachelor of Science in Nursing degree is designed to fill a workforce need by optimizing the practice of registered (RN) nurses who have earned an associate degree in nursing. This RN to BSN completion degree builds upon students' previous nursing education as well as experience working as a registered nurse. Coursework contributes to a robust understanding of leadership in evidence-based, culturally responsive nursing care to promote health, prevent disease, and improve health outcomes in individuals and populations. Students must have graduated from an accredited pre-licensure nursing program and hold a valid, unencumbered, U.S. RN license.

## Career Opportunities

The bachelor's degree in nursing augments the foundational nursing degree to enhance clinical practice and improve outcomes for nurses working in direct patient care as well as nurses in leadership and management roles in which the minimum degree requirement is a bachelor's degree in nursing. The deficit of nurses without a bachelor's degree in nursing in the Dayton region is over 700.

## Prerequisites

- Students must have graduated from a nationally accredited pre-licensure nursing program and hold a valid, unencumbered, U.S. RN license.
- Students with a dismissed standing from Sinclair Community College are required to complete Sinclair's readmissions policy steps and be readmitted to the college prior to applying for the BSN program. Contact Academic Advising to learn more.


## Program Accreditation Information

Effective October 19, 2023, this program is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing.

This candidacy status expires on October 19, 2025. Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000
http://www.acenursing.com/candidates/candidacy.asp
Note: Upon granting of initial accreditation by the ACEN Board of Commissioners, the effective date of initial accreditation is the date on which the nursing program was approved by the ACEN as a candidate program that concluded in the Board of Commissioners granting initial accreditation.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2202-General Pharmacology
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 2205 - Microbiology
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I
- COM 2206 - Interpersonal Communication
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HUM 1130 - Humanity \& the Challenge of Technology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MAT 1450 - Introductory Statistics
- NSG 1200 - Introduction to Nursing
- NSG 1400 - Health \& Illness I: Foundational Concepts in Nursing
- NSG 1450 - Professional Nursing I: Introduction to the Role of the Professional Nurse
- NSG 1600 - Health \& Illness II: Health \& Wellness Concepts
- NSG 1650 - Professional Nursing II: Healthcare System Concepts
- NSG 2400 - Health \& Illness III: Health \& Wellness Concepts
- NSG 2450 - Professional Nursing III: Leadership \& Management of Care
- NSG 2600 - Concept Synthesis
- NSG 3101 - Nursing Theory
- NSG 3103 - Nursing Evidence-Based Practice
- NSG 4101 - Community Nursing
- NSG 4102 - Cultural Competency
- NSG 4110 - Nursing Leadership
- NSG 4120 - RN to BSN Capstone
- PHI 2206 - Introduction to Ethics
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- SOC 1101 - Introduction to Sociology
- SOC 2205 - Social Problems
- Nursing Elective 6 Cr. Hrs.

Nursing Electives

- NSG 4103 - Informatics for the Professional Nurse
- NSG 4104 - Advanced Health Assessment \& Health Promotion
- NSG 4105 - Population Health
- NSG 4106 - Women's Health
- NSG 4107 - Academic Nurse Educator


## Unmanned Aerial Systems, BAS

## Program Code: UAS.S.BAS Credit Hours 120-124

## Description

This Bachelor of Applied Science (BAS) degree in Unmanned Aerial Systems (UAS) is designed to fill a growing workforce need by developing the technical skills of students and prepare them for jobs in this high demand industry. The degree provides a foundational understanding of UAS mission planning, advanced flight operations, hands-on maintenance, laws and regulations, data analytics, sensor operations and technology integration and testing in support of diverse industries. These include precision agriculture, infrastructure inspection, aerial mapping and surveying, first response, logistics, security, and other emerging applications that will continue to develop as the industry grows. Students will prepare for and conduct unmanned flights similar to those commonly performed in the industry observing Federal Aviation Administrations (FAA) regulations that govern UAS operations.

## Career Opportunities

More than 100,000 new jobs in UAS related fields are predicted nationwide by 2025. A technical baccalaureate degree in Unmanned Aerial Systems (UAS) will prepare the graduate to work in a variety of roles including UAS operations, maintenance, data analysis, sensor operations, technology integration and testing, and basic manufacturing in support of diverse industries including precision agriculture, infrastructure inspection, aerial mapping and surveying, first response,
logistics, security, and other emerging applications that will continue to develop as the industry grows.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1246 - Air Traffic Control Communications
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- AVT 2240 - Human Factors in Aviation
- AVT 2279 - Unmanned Aerial Systems Project
- AVT 2280 - Introduction to UAS Maintenance
- AVT 2700 - Aviation Internship

Choose one UAS track from:

- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis AND
- AVT 1123 - Acoustic \& CBRNE Data Analysis OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1108 - UAS First Responder Applications AND
- CJS 1101 - Introduction to Criminal Justice Science AND
- CJS 1155 - Homeland Security Issues \& Administration AND
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory OR
- AVT 1114 - Geospatial Information for UAS AND
- CAT 1501 - Fundamentals of Surveying \& Mapping AND
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1112 - UAS Precision Agriculture AND
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200 - Agricultural Economics AND
- AGR 1300 - Agronomy OR
- AVT 4215 - Autonomous Systems in Aviation AND
- CIS 2266 - Python for Data Analytics AND
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence OR
- AVT 1115 - Introduction to UAS Entrepreneurship AND
- AVT 2115 - UAS Entrepreneurship Capstone AND
- MAN 1107 - Foundations of Business AND
- LAW 1101 - Business Law
- AVT 3100 - Contemporary Technical, Legal \& Regulatory Issues in UAS
- AVT 3151 - UAS Operations II
- AVT 3152 - UAS Operations II Lab
- AVT 3200 - UAS Logistics
- AVT 3300 - Artificial Intelligence (AI) in Aviation
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 3500 - UAS Design Concepts
- AVT 4151 - Unmanned Systems Mission Planning
- AVT 4210 - Advanced UAS Maintenance
- AVT 4220 - Human Autonomy Teaming in Aviation
- AVT 4270 - UAS Internship II
- AVT 4279 - Unmanned Aerial Systems Senior Project
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EET 2221 - UAS Sensors \& Systems
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Any Group $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective (from two or more disciplines) $6 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective (from two or more disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathrm{s})$.
- PHY 1141-College Physics I
- PHY 1142 - College Physics II
- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis AND
- AVT 1123-Acoustic \& CBRNE Data Analysis OR
- Unmanned Aerial Systems elective


## Programs A-Z

## Two-Year Degree Programs

## Accounting, AAS

## Program Code: ACC.S.AAS • Credit Hours: 64

## Description

Accountants prepare, analyze and verify financial reports and monitor information systems that furnish this information to management. Business executives, bankers, government leaders and investors all rely on financial statements and other reports prepared by accountants that summarize and interpret financial transactions that occur in every business. An accountant must have the ability to develop reliable analyses of business operations which can be used in making business decisions. Students who complete the accounting program can qualify to sit for the CPA exam in Ohio after completing a few additional courses and a qualifying exam as determined by the Ohio Board of Accountancy.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for-profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- ACC 1510 - Computerized Accounting Systems
- ACC 2101 - Intermediate Accounting I
- ACC 2102 - Intermediate Accounting II
- ACC 2211 - Cost Accounting
- ACC 2212 - Managerial Accounting \& Finance
- ACC 2321 - Federal Taxation
- ACC 2435 - Auditing
- ACC Accounting Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160-Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- LAW 1101 - Business Law
- MRK 2101 - Principles of Marketing Management
- MAN 1107 - Foundations of Business
- MAT 1460 - Mathematics for Business Analysis OR
- MAT 1470 - College Algebra
- MAT 2170 - Business Statistics I
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Accounting Electives

- ACC 2270 - Accounting Internship
- ACC 2322 - Advanced Taxation
- ACC 2510 - Advanced Accounting
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- LAW 1102 - Consumer Law
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1110 - International Business
- MAN 2110 - Introduction to Project Management


## Addiction Services, AAS

## Program Code: MHTCD.S.AAS • Credit Hours: 65

## Description

In the Mental Health and Addiction Services department, the Addiction Services degree program prepares entry-level professionals for employment working on an inter-disciplinary team with clinical supervision in chemical dependency treatment settings. Graduates of this program work directly with a diverse group of clients. The program can be taken full-time or part- time. If enrolled full-time, it is designed to be completed in five (5) semesters. It consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. Second-year practicum hours can be submitted toward partial employment requirements of the Ohio Chemical Dependency Professionals Board (OCDP). To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the web page. A cumulative GPA of 2.0 is required, as well as an initial faculty advising appointment during MHT 1101. A grade of C or higher is required in all program courses. The practicum portion of the curriculum provides 420 hours of supervised experience. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Addiction Services graduates can work at hospitals, substance use disorder treatment centers, and numerous other field-related positions in the community. Graduates have completed the 180 hours of specific education required to sit for the LCDC II exam. The OCDP Board has other requirements for licensure.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1111 - General Biology I
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 1201 - Interviewing Skills
- MHT 1202 - Motivational Interviewing
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2105 - Mental Health Treatment Methods
- MHT 2111 - Group Dynamics I
- MHT 2121 - Practicum I
- MHT 2137 - Treatment Techniques in Substance Use Disorders
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2211 - Group Dynamics II
- MHT 2222 - Practicum II
- MHT 2235 - Family Dynamics of Addiction
- PSY 1100 - General Psychology
- PSY 2217 - Abnormal Psychology
- SWK 2207 - Anti-Oppressive Social Work


## Agricultural Sciences, AAS

## Program Code: AGR.S.AAS • Credit Hours: 62

## Description

The Agricultural Sciences Program offers competency in specialized skill areas such as Unmanned Aerial System Precision Agriculture, Alternate and Renewable Energy Sources, and Hazardous Waste Operations and Emergency Response. Graduates of an Agricultural Sciences Program will contribute to filling the current and growing need within the state of Ohio for educated Agricultural personnel. External certificates that will be offered to students within the curriculum include; OSHA Basic Safety in the Workplace, OSHA, Agricultural Safety, HAZWOPER, Pork Quality Assurance, Beef Quality Assurance, ServSafe, +/- Bovine Artificial Insemination.

## Career Opportunities

The associate degree program in Agricultural Sciences prepares competent entry-level Agricultural personnel with additional potential expertise in the following added areas: Agribusiness, Large Animal Sciences, Horticulture, Diesel Mechanics, and Precision Agriculture in UAS. The agricultural sciences are an important part of our past as well as our future, and educated personnel are more in-demand as safer, more specialized workers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- AGR 1160 - Introduction to Agriculture Science
- AGR 1300-Agronomy OR
- AGR 1110 - Introduction to Large Animal Sciences: Handling \& Husbandry
- AGR 1400 - Agriculture Internship
- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1112 - UAS Precision Agriculture
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- BTN 1110 - Biotechnology \& Bioethics
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- EGV 1101 - Alternate \& Renewable Energy Sources
- ENG 1101 - English Composition I
- FST 1555 - Hazardous Waste Operations \& Emergency Response (HAZWOPER)
- LAW 1101 - Business Law AND
- AGR 1200-Agricultural Economics OR
- AGR 1111 - Principles of Large Animal Reproduction OR
- AGR 1112 - Principles of Large Animal Nutrition
- MRK 2100 - Foundations of Marketing
- MRK 2135 - Digital Marketing
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).


## Applied Psychology, AAS

## Program Code: PSY.S.AAS • Credit Hours: 60

## Description

The Applied Psychology program will prepare students for entry level positions in a number of fields including research, behavioral analysis, education, mental health, and community service. The coursework will emphasize development of skills and knowledge to enable students to work in high-demand areas related to applied research and behavioral analysis. The curriculum includes courses in research design and statistics, behavior analysis and modification, industrial/organizational psychology, and human factors psychology, as well as current psychological theory and practice. The curriculum includes many Ohio Transfer 36 (OT36) courses and fulfills many general education requirements. This degree prepares students to directly enter the workforce and it transfers well to most 4 -year colleges and universities.

## Career Opportunities

Graduates may be employed as research assistants, project/research coordinators, information analysts, behavioral skills technicians, and teaching/special education aides. Graduates also work as psychiatric and mental health technicians, case workers or managers, victim advocates, residential/group home specialists, and in a variety of positions where knowledge of human behavior and mental processes is beneficial (i.e. salesperson, human resources specialist, employee at not-for-profit agencies, administrative assistant, etc.).

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. Hr.(s)
- OT36 Arts \& Humanities Elective (from two or more disciplines) 6 Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective (must not be PSY) $\mathbf{3} \mathbf{C r}$. Hr.(s)
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PSY 2225 - Social Psychology
- PSY 2228 - Industrial Organizational Psychology
- PSY 2235 - Behavioral Science Research Methods
- PSY 2236 - Behavioral Science Statistics
- PSY 2250 - Behavior Modification
- PSY Applied Psychology Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Any course in catalog elective $\mathbf{3} \mathbf{C r}$. Hr.(s)

Applied Psychology Electives

- PSY 1160 - Black Psychology
- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2214 - Drugs \& Behavior
- PSY 2218 - Principles of Counseling
- PSY 2220 - Personality Psychology
- PSY 2242 - Educational Psychology
- PSY 2270 - Psychology Service Learning


## Architectural Technology, AAS

Program Code: ARC.S.AAS • Credit Hours: 62-65

## Description

The Architectural Technology program helps students develop skills applicable in a variety of Built Environment professions, including architectural, engineering and design practices, contracting firms, and material suppliers. Building Information modeling (BIM) and Integrated Project Design (IPD) are core principles taught throughout the curriculum, with Autodesk Revit being the primary BIM tool. Environmental responsibility is emphasized, with students taking a USGBC LEED exam prep course. Curriculum tracks are available for both building technology and building design.

## Career Opportunities

Graduates are employed as drafters for architectural firms, inspectors and project managers in the construction industry. Many opportunities exist in the building materials and assemblies sales and supply area.

Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 1341 - Architectural Design I
- CAT 2101 - Architectural Design II
- CAT 2201 - Architectural Visualization
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2700 - Architectural Technology Internship
- CAT 2780 - Architectural Technology Capstone
- COM 2211 - Effective Public Speaking
- EGV 1301 - Architectural Energy Analysis
- EGV 2351 - LEED Green Associate Exam Preparation
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 1200-Technical Mathematics
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 C r} \mathbf{~ H r ( s ) . ~}$
- PHY 1100 - Introduction to Physics OR
- PHY 1141 - College Physics I
- Architectural Technology Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Architectural Technology Electives

- ART 1111 - Drawing I
- ART 1112 - Drawing II
- CAT 1131 - Introduction to Revit MEP
- CAT 1141 - Reading Architectural Drawings
- CAT 1161 - Introduction to the Built Environment
- CAT 1401 - Construction Cost Estimating
- CAT 2401 - Construction Project Management
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- CAT 2741 - Current Topics in Architecture
- EGV 1251 - Introduction to Energy Management Principles
- IND 1180 - History \& Theory of Interior Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2140 - Sustainable Design
- VIS 1140 - Design Processes I


## Art, AA

Program Code: ART.S.AA • Credit Hours: 65

## Description

The Art university parallel program is oriented toward students who intend to transfer to a four-year college or university. The Art curriculum challenges students' creative thinking abilities with its studio and art history courses. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

For students who want a career in art, the faculty of working professional artists will advise and assist in developing techniques and a body of work that will transfer well to other colleges and universities. If the goal is to set up a working studio after graduation, students will be given the necessary information by the faculty. Although the most obvious career for college graduates with art degrees is that of fine artists, there are other opportunities which require the skill, knowledge and talents gained through the study of art. These include art teachers, art historians, art curators and art therapists.

## Program Requirements

- ART Art History Elective $\mathbf{3} \mathbf{C r} \mathbf{.} \mathbf{H r}(\mathbf{s})$.
- ART ART Concentration Elective $\mathbf{6} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- ART ART Elective $9 \mathbf{C r} \mathbf{H r} \mathbf{~} \mathbf{s}$ ).
- ART ART 2D or 3D Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- ART 1101-2-D Foundations
- ART 1102-3-D Foundations
- ART 1111 - Drawing I
- ART 2230 - Art History: Ancient through Medieval Periods
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 2270 - Fine Art Internship
- ART 2295 - Graduation Portfolio Development \& Exhibition
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Social \& Behavioral Sciences Elective (from two or more discplines) $6 \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{H r} \mathbf{~} \mathbf{s}$ ).
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Arts \& Humanities Elective (May not be an ART course) $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.

Drawing Concentration (2D)

- ART 1112 - Drawing II
- ART 2111 - Intermediate Drawing I

Life and Anatomy Concentration (2D)

- ART 2217 - Life Drawing \& Anatomy II

Painting Concentration (2D)

- ART 1121 - Beginning Painting I
- ART 1122 - Beginning Painting II

Photography Concentration (2D)

- ART 1161 - Black \& White Darkroom Photography I AND
- ART 1162 - Black \& White Darkroom Photography II OR
- ART 2265 - Digital Color Photography I OR
- ART 1170 - Alternative Photographic Processes OR
- ART 1171 - Studio Photography

Printmaking Concentration (2D)

- ART 2269 - Printmaking I
- ART 2279 - Printmaking II

Ceramics Concentration (3D)

- ART 1141 - Introduction to Ceramics
- ART 1142 - Intermediate Ceramics

Sculpture Concentration (3D)

- ART 1131 - Introduction to Sculpture
- ART 1132 - Intermediate Sculpture

2D Electives

- ART 1112 - Drawing II
- ART 1121 - Beginning Painting I
- ART 1122 - Beginning Painting II
- ART 1161 - Black \& White Darkroom Photography I
- ART 1162 - Black \& White Darkroom Photography II
- ART 1170 - Alternative Photographic Processes
- ART 1171 - Studio Photography
- ART 1175 - Computer Photography
- ART 2111 - Intermediate Drawing I
- ART 2112 - Intermediate Drawing II
- ART 2216 - Life Drawing \& Anatomy I
- ART 2217 - Life Drawing \& Anatomy II
- ART 2221 - Intermediate Painting-Observation \& Concept
- ART 2222 - Intermediate Painting - The Figure
- ART 2265 - Digital Color Photography I
- ART 2269 - Printmaking I
- ART 2279 - Printmaking II
- ART 2280 - Intermediate Printmaking I
- ART 2281 - Intermediate Printmaking II
- ART 2285 - Printmaking - Monotype
- ART 2216 - Life Drawing \& Anatomy I
- ART 1131 - Introduction to Sculpture
- ART 1132 - Intermediate Sculpture
- ART 1133 - Figurative Sculpture
- ART 1141 - Introduction to Ceramics
- ART 1142 - Intermediate Ceramics
- ART 2141 - Advanced Ceramics

Art History Electives

- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- ART 2239 - History of Asian Art


## Associate of Arts, AA

Program Code: LA.S.AA • Credit Hours: 60

## Description

The Associate of Arts-Liberal Arts is designed for students who are planning to transfer to a four-year college or university in a variety of majors, including education. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Transferring students can select specific electives based on the requirements of their intended major at the receiving institution. Students should communicate with the receiving institution early into their educational program and are required to work with an academic advisor to select appropriate courses. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Students will graduate with a general understanding of the complex nature of human society. Introductory knowledge of communication, critical thinking and inter-cultural awareness will transfer to baccalaureate programs or as soft skills in a variety of industries.

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $9 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $9 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Any Course in Catalog Elective - 20 Cr. $\mathbf{H r}(\mathbf{s})$.


## Associate of Individualized Study, AIS

## Program Code: AIS.S.AIS • Credit Hours: 60

## Description

The Associate of Individualized Study (AIS) degree is open to any student who wishes to design an interdisciplinary degree program using liberal arts or combining liberal arts with technical areas of study. As an alternative, part of the student's degree requirements may incorporate credit awarded through articulation agreements with community education providers or a combination of both. The student may focus specifically on education for individual development and enrichment or may design a curriculum that allows for employment or continuation into selected four-year degree programs. Note: This program requires an approved AIS application. Please contact plaprograms@sinclair.edu to complete the process. When applying for admission to Sinclair, select the Associate of Arts (LA.S.AA) degree. Upon your AIS application being approved, you will be moved into this program of study.

## General Education

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.

Two of the following three areas required to total 6 semester hours

- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r . ~} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural and Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective 3 Cr. Hr(s).
- AIS Concentration $30 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- AIS Related Electives 15 Cr . $\mathrm{Hr}(\mathrm{s})$.


## Associate of Science, AS

## Program Code: LA.S.AS • Credit Hours: 60-62

## Description

The Associate of Science is designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs such as Biology, Chemistry, Geology, Mathematics, Physics and Pre-professional programs, i.e. Medicine, Pharmacy, etc. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1450 - Introductory Statistics OR
- MAT 1455 - Introduction to Data Science OR
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence OR
- MAT 2240 - Calculus for the Life Sciences OR
- MAT 2570 - Discrete Mathematics OR
- MAT 2270 - Calculus \& Analytic Geometry I
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $\mathbf{1 2} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $\mathbf{6 C r} \mathbf{~ H r ( s ) . ~}$
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Any Course in Catalog Elective - $20 \mathbf{C r} \mathbf{~ H r ( s ) . ~}$


## Associate of Technical Study, ATS

## Program Code: ATS.S.ATS • Credit Hours: 60

## Description

The Associate of Technical Study (ATS) degree is open to any student whose technical degree goals cannot be accomplished through enrollment in one of Sinclair's existing technical degree programs. The student may design a degree which combines two or more technical areas into a unique education plan. As an alternative, part of the student's degree requirements may incorporate credit awarded through articulation agreements with community education providers, or a combination of both. In all cases, faculty members assist the student in planning the most appropriate course of study for the individual. Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu to complete the process. When applying for admission to Sinclair, select the Associate of Arts (LA.S.AA) degree. Upon your ATS application being approved, you will be moved into this program of study.

## General Education

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Two of the following three areas required to total 6 semester hours

- OT36 Arts and Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural and Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- ATS Concentration $30 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- ATS Related Electives $\mathbf{1 5} \mathbf{C r} . \mathrm{Hr}(\mathrm{s})$.


## Automation \& Control Technology with Robotics, AAS

Program Code: AMCT.S.AAS • Credit Hours: 62-68

## Description

The Automation and Control Technology with Robotics program builds knowledge in the application of electrical and mechanical skills for developing, installing, programming and troubleshooting the complex machinery found in the modern manufacturing and Supply Chain environments.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

This program prepares graduates for control system technician and designer, electrical and electronic systems engineering technician, industrial equipment sales, purchasing, installation, and service. Graduates will also be prepared to assume roles as industrial maintenance technician, plant maintenance technician, robotics technician, system integrators, and supply chain technician.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 1131 - Digital Electronics OR
- EET 1198 - Digital Technology
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231 - Troubleshooting of Automated Systems
- EGR 2252-Teach Pendant Robot Programming
- EGR 2278 - Automation \& Control Capstone
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 2711 - Ethics for Engineering Technology Professionals
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- PHY 1141 - College Physics I
- EET 2157 - Radio Frequency Identification (RFID) Technology OR
- EGR 2250 - Electromechanical Repair
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MET 1301 - SolidWorks Basics
- EGR 2256 - Automated Data Acquisition Systems OR
- EGR 2261 - Engineering Problem Solving using "C" \& "C++" OR
- EGR 2275 - Automation \& Control Technology Internship OR
- EGR 2250 - Electromechanical Repair


## Automotive Technology (GM ASEP), AAS

## Program Code: ASEP.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in General Motors Automotive Service Educational Program (ASEP) provides training for students aspiring to become automotive technicians for General Motors dealerships or AC Delco independent shops. Specific General Motors training is presented to apprentice student technicians as they apply learned content to a co-op work experience. Students attend classes for half a semester and then apprentice at a GM/ AC Delco sponsoring dealership the other half. Students are paid for work rendered during the co-op experience. Upon graduation, students will receive hundreds of hours of official General Motors training credits that are recorded in the corporation's training database. Graduates should be 85 to $90 \%$ trained towards meeting the certification requirements for a GM Master Technician. Graduates will also receive an Associate of Applied Science from Sinclair along with a job opportunity from the sponsoring dealer. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in General Motors dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness to work and a high degree of professionalism
may expect to find jobs in middle management or research occupations within major automotive corporations.

## Program Requirements

- AUT Automotive Elective $2 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- AUT 1108 - Automotive Engine Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology

Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology (Honda PACT), AAS

## Program Code: AUTHA.S.AAS • Credit Hours: 65

## Description

This Associate of Applied Science program provides training for students aspiring to become Honda/Acura dealership technicians and requires students to co-op at a Honda or Acura dealership. Students receive specific Honda technical training resulting in training,
credits/certifications from the corporation. These credits/ certifications help a student secure employment with a Honda/ Acura dealership.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Program Requirements

- AUT Automotive Elective $2 \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).

Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology (Mopar CAP), AAS

## Program Code: CAP.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in the Mopar Career Automotive Program (CAP) provides training for students aspiring to become automotive technicians for Chrysler, Dodge, Jeep, and Ram dealerships. Specific Chrysler training is presented to apprentice student technicians as they apply learned content to a co-op work experience. Students attend classes for half a semester and then apprentice at a Fiat Chrysler Automobile sponsoring dealership the other half. Students are paid for work rendered during the co-op experience. Upon graduation, students will receive hundreds of hours of official Chrysler training credits that are recorded in the corporation's training database. Graduates should be $85 \%$ to $90 \%$ trained towards meeting the certification requirements for a Chrysler Master Technician. Graduates will also receive an Associate of Applied Science from Sinclair along with a job opportunity from the sponsoring dealer.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in Chrysler, Dodge and Jeep dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness to work and a high degree of professionalism may expect to find jobs in middle management or research occupations within major automotive corporations.

Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology

Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology, AAS

Program Code: AUT.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in Automotive Technology provides training for students aspiring to become automotive technicians. Training in automotive management and business operations is a component of the program. To earn the associate degree students must participate in a capstone course offered only during the day or complete four paid internship courses with an automotive service facility.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE
AccreditedTraining Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Graduates are finding excellent employment opportunities existing in dealerships, independent service facilities, machine shops and other automotive businesses. Graduates may also find employment as automotive instructors or sales, service and parts managers.

## Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- AUT 1170 - Automotive Internship I AND
- AUT 1171 - Automotive Internship II AND
- AUT 1172 - Automotive Internship III AND
- AUT 1173 - Automotive Internship IV OR
- AUT 2250 - Automotive Service Operations
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. Hr(s).
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).

Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Aviation Maintenance Technology, AAS

## Program Code: AVIAO.S.AAS • Credit Hours: 89

## Description

This program leads to an Associate of Applied Science in Aviation Maintenance Technology and provides the knowledge and skills required by the Federal Aviation Administration (FAA) for certification as an Aviation Maintenance Technician (AMT). To become an AMT, two ratings are required, the Airframe (A) and the Powerplant (P); this is commonly referred to as an "A\&P Certificate". Students will complete the requirements for Sinclair's General, Airframe and Powerplant Aviation Maintenance certificates and will refine the knowledge and skills they have learned with extensive hands-on training in the aviation maintenance lab. Students, having completed this course work, will be eligible to test for the FAA A\&P Certificate. The graduate can either continue towards a bachelor's degree in aviation (or related field) or can begin a career as an AMT. Sinclair is an FAA-approved Aviation Maintenance Technician School (AMTS) under Part 147.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The programs General and Airframe certificates are approved by the FAA under air agency certificate XSCT086K.

## Career Opportunities

The Bureau of Labor Statistics projects "favorable future job opportunities" over the long term as older mechanics and technicians retire. Maintenance Repair Organizations (M.R.O.s) are contracting for the work that airlines used to do in house. Many of the M.R.O.s are in need of maintenance technicians. Boeing Commercial Aircraft Company recently predicted $1,000,000$ more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next 15-20 years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1106 - Airframe Safety Systems
- AVT 1107 - Fuel Systems
- AVT 1113 - Drawings for Aviation
- AVT 1116 - Regulations for Maintenance
- AVT 1118 - Weight \& Balance
- AVT 1128 - Powerplant Safety Systems
- AVT 2122 - Ignition \& Starting
- AVT 2126 - Reciprocating Engines
- AVT 2129 - Propellers
- AVT 2138 - Engine Fuel \& Fuel Metering
- AVT 2219 - Turbine Engines
- AVT 1132 - Basic Aviation Electricity II
- AVT 1133 - Instruments/Communications
- AVT 1135 - Materials \& Processes
- AVT 1136 - Sheet Metal
- AVT 1213 - Corrosion
- AVT 1214 - Cabin Atmospheric Control
- AVT 1218 - Utility Systems
- AVT 2121 - Assembly \& Rigging
- AVT 2132 - Airframe Electrical Systems
- AVT 2143 - Review \& Recommendation
- AVT 2236 - Non-Metallic Structures
- AVT 2237 - Aircraft Inspections
- AVT 2280 - Introduction to UAS Maintenance
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1106 - Physics for Technology
- PHY 1107 - Lab for Physics for Technology


## Aviation Technology, AAS

## Program Code: AVIAT.S.AAS • Credit Hours: 64

## Description

This program leads to an Associate of Applied Science in Aviation Technology. The student, having completed this course work, would have the background and skills to enter the aviation industry or continue towards a bachelor's degree in aviation science (or related field).

## Career Opportunities

Career opportunities are available in airline, corporate and general aviation. Growth in major, regional and low-cost airlines will increase demand for all types of aviation professionals in these companies. In addition, aviation professionals with higher levels of experience and education will have more robust job opportunities. A large number of the positions created in the coming years will be the result of older workers retiring from the industry, prompting the need for new hires.

## Program Requirements

- AVT Any Aviation Course 21 Cr. $\mathbf{H r}(\mathbf{s})$.
- AVT 1105 - Orientation to Aviation
- AVT 1119-Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1245-Aviation Law
- AVT 2125 - Developments in Aviation I
- AVT 2146 - Introduction to Airline Operations
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2700 - Aviation Internship
- COM 2206 - Interpersonal Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- MAT 1570 - Analytic Geometry \& Trigonometry
- MET 1131 - Personal Computer Applications for Engineering Technology
- PHY 1141 - College Physics I


## Aviation Technology/Professional Pilot, AAS

## Program Code: APPAO.S.AAS • Credit Hours: 66-68

## Description

This program leads to an Associate of Applied Science in Aviation Technology/Professional Pilot and is designed for students who want to pursue a career as a professional pilot. The student, having completed this course work, will have the background, skills and FAA credentials to enter the aviation industry as a professional pilot or continue towards obtaining an aviation bachelor's degree. Students may choose fixed wing or helicopter pilot pathways. The curriculum in the Professional Pilot program is rigorous and is designed for full time students to complete in 4 semesters. Students must maintain a minimum of a 2.5 GPA. Enrollment in the flight lab courses is limited and priority will be given to fulltime, degree seeking students. Part time students will be admitted on a space available basis. The student must obtain a Federal Aviation Administration (FAA) 2nd class medical certificate prior to enrolling in any of the flight labs.

In addition to standard tuition fees there are additional course and lab fees for each of the flight labs in the program. The flight lab fees are structured to cover the costs associated with the minimum flying hours required for each FAA certificate. Any additional flying time costs beyond the FAA minimums covered by the flight lab fee must be borne by the student. See the Department for the latest course and flight lab fee costs.

## Career Opportunities

Excellent career opportunities are available in airline, corporate and business aviation. The 2018 Boeing Pilot \& Technician Outlook, a respected industry forecast of personnel demand, projects that 790,000 new civil aviation pilots will be needed to fly and maintain the world fleet over the next 20 years. The forecast is inclusive of the commercial aviation, business aviation, and civil helicopter industries. The demand will stem from a mix of fleet growth, retirements, and attrition. PSA Airlines, a local regional airline, has a continuous need for new pilots and had excellent hiring incentive programs.

Program Requirements

- AVT 1105 - Orientation to Aviation
- AVT 1119-Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1254 - Flight Simulator Instruction
- AVT 1245-Aviation Law
- AVT 2146 - Introduction to Airline Operations
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2247 - Aerodynamics \& Flight Mechanics I
- AVT 2258 - Flight Instructor Ground
- AVT 2700 - Aviation Internship
- AVT 1110 - Private Pilot Ground School AND
- AVT 1124 - Private Pilot Flight Lab - Airplane Single Engine AND
- AVT 1170 - Instrument Pilot Ground School AND
- AVT 1224 - Instrument Pilot Flight Lab - Airplane Single Engine AND
- AVT 2250 - Commercial Pilot Ground AND
- AVT 2263 - Commercial Pilot Flight Lab - Airplane Single Engine AND
- AVT 2269 - Flight Instructor Flight Lab - Airplane Single Engine OR
- AVT 1111 - Helicopter Private Pilot Ground AND
- AVT 1126 - Private Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 1171 - Helicopter Instrument Pilot Ground AND
- AVT 1226 - Instrument Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2251 - Helicopter Commercial Pilot Ground AND
- AVT 2265 - Commercial Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2271 - Flight Instructor Flight Lab - Rotorcraft Helicopter
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470-College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I

Biology, AS

Program Code: BIOE.S.AS • Credit Hours: 60

## Description

The Associate of Science in Biology is designed for students who are planning to transfer to a four-year college or university and pursue a baccalaureate degree in biology. The curriculum fulfills the freshman and sophomore requirements of most colleges and universities. The biology courses offer a solid foundation in key areas of biology such as cell biology, genetics, evolution, and ecology with a broad survey of life on Earth. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 to graduate.

## Career Opportunities

Studying biology opens the door to a wide variety of teaching, research, and service careers including health sciences, forensic science, environment, agriculture, and science writing. Students of the biological sciences find jobs in colleges and universities, primary and secondary schools, museums, zoos, nature centers, hospitals, clinics, and laboratories. Governments need the expertise of biologists to formulate sound policies and legislation. Many non-profit organizations, businesses, and industries also depend on biologists to fulfill their missions.

## Program Requirements

- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- BIO 2222 - Evolution
- BIO 2225 - Ecology
- BIO 2235 - Genetics
- BIO 2236 - Lab for Genetics
- CHE 1211 - General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r . ~} \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Biotechnology, AAS

## Program Code: BTN.S.AAS • Credit Hours: 61-64

## Description

The Associate of Applied Science in Biotechnology provides a full range of courses to prepare students for entry-level positions in the
biotechnology field. The academic curriculum provides a background in historical development of biotechnology, bioethics, safety, reagent preparation, cell culture techniques, protein purification and analysis techniques, microbiology and fermentation methods, molecular biology (DNA) techniques and bioinformatics. With advances in molecular and cellular biology, the biotechnology industry has expanded in scope to include human diagnoses and therapeutics, agricultural and veterinary applications, food production and environmental cleanup.

## Career Opportunities

This degree program prepares graduates to enter the biotechnology workforce as entry-level technicians and conduct a variety of basic and advanced laboratory techniques used in biomedical research.

## Program Requirements

- BIO 1107 - Human Biology
- BIO 1111 - General Biology I AND
- BIO 1211 - General Biology II OR
- BIO 1171 - Principles of Biology I AND
- BIO 1272 - Principles of Biology II
- BIS 1120 - Introduction to Software Applications
- BTN 1110 - Biotechnology \& Bioethics
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- BTN 1130 - Biological Reagents Preparation
- BTN 1140 - Cell Culture
- BTN 2210 - Protein Purification \& Analysis
- BTN 2220 - Microbiology \& Fermentation Methods
- BTN 2230 - Molecular Biology Techniques
- BTN 1201 - Biotechnology Careers OR
- BTN 2700 - Biotechnology Internship
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective $\mathbf{6}$ Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Business Administration, AS

## Program Code: BUS.S.AS • Credit Hours: 63

## Description

The University Parallel program is designed for the student who wants to pursue a baccalaureate degree at a four-year institution in a business discipline. The purpose of the degree program is to provide the basic core of business and general education requirements for the first two years of a four-year program. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENG 1201 - English Composition II OR
- MAT 2180 - Business Statistics II
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MRK 2101 - Principles of Marketing Management
- MAT 2160 - Calculus for Business \& Economics
- MAT 2170 - Business Statistics I
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (May not be ECO course) $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) .}$


## Business Information Systems, AAS

Program Code: BIS.S.AAS • Credit Hours: 60-61

## Description

Students in this program will learn advanced features in various software applications and will practice integrating multiple applications to be more productive. The degree includes a strong technology emphasis and sound business foundation with courses in accounting, economics, management and business math. The program will prepare software and information technology staff in all industries to work in teams, support internal and external customers, and use new technologies to maximize business productivity. Students will select one of four concentrations: software applications, computer support, business analytics, or medical office to gain expertise in their area of interest.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Association (CHEA).

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities, to name a few.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 2170 - BIS Capstone
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Software Applications 18-19 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Business Data 18-19 Cr. Hr(s). OR
- Medical Office 18-19 Cr. $\mathbf{H r}(\mathrm{s})$. OR
- Computer Support 18-19 Cr. Hr(s).

Software Applications Concentration

- BIS 1201-Keyboarding \& Document Formatting
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1400 - Customer Service
- BIS 2270 - Business Information Systems Internship
- BIS or MAN/MRK Elective
- OT36 Natural \& Physical Sciences Elective

Business Data Concentration

- CIS 1140 - Information Systems Analysis \& Design
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- MAN 2155 - Management Information Systems
- CIS 2265 - Data Visualization with Tableau
- OT36 Natural \& Physical Sciences Elective

Medical Office Concentration

- BIO 1121 - Human Anatomy \& Physiology I
- BIS 1400 - Customer Service
- BIS 2180 - Medical Office Simulation
- BIS 2270 - Business Information Systems Internship
- HIM 1101 - Medical Terminology
- HIM 1201 - Introductory Medical Office Coding

Computer Support Concentration

- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1400 - Customer Service
- BIS 2270 - Business Information Systems Internship
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2731-A+ Hardware \& Software


## Business Management, AAS

## Program Code: GBM.S.AAS • Credit Hours: 60

## Description

This program emphasizes preparation for a wide variety of management-related positions. It is designed to provide a balance in technical business education along with general education courses while providing a considerable choice of electives and alternatives. Opportunities for managers include supervision, office managers, management trainees, assistant managers and owners within a variety of settings, including small and medium-size businesses, corporations, industries, non-profit organizations and governmental agencies.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 2270 - Management Internship OR
- MAN 2275 - Retail Management Capstone OR
- MAN 2279 - Business Management Capstone
- MAN 1107 - Foundations of Business
- MAN 1110 - International Business OR
- MAN 2110 - Introduction to Project Management
- MAN 2150 - Management \& Organizational Behavior
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural and Physical Science Elective 3 Cr. Hr(s).
- Any Course in Catalog 18 Cr. $\mathrm{Hr}(\mathbf{s})$.


## Business Management/Digital Marketing, AAS

Program Code: MRK.S.AAS • Credit Hours: 64-65

## Description

Digital Media has disrupted many of the traditional areas of business management. This program provides a broad-based study of digital marketing strategies including customer engagement and consumer behavior, social media, online reputation management, inbound marketing, advertising and branding, graphic design, and website development. Students will have the opportunity to learn new media theories, online consumer psychology and marketing approaches while developing hands on experience with digital marketing tools and techniques. All students will produce a portfolio of their digital marketing projects and benefit from an internship in the digital marketing field.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

According to a recent jobs survey from Adecco's Creative and Marketing Recruiting Division, "Inbound Marketing is on the rise" and many consumers are making their initial approach to a business using mobile media/smartphones, social media, social networks and search engines. Many marketing departments are not fully prepared to address this shift in consumer behavior. $82 \%$ of survey respondents indicated they don't have formal training in digital marketing and frequently learn on the job. Further, $60 \%$ of respondents think their company's digital marketing is ineffective. There is a significant need for a formalized education program in the digital marketing space. Employers are actively searching for candidates that have formalized education and experience in digital marketing. Within the digital marketing space, there are multiple career paths that a student can pursue. If a student has a passion for social media, there are positions available as a
social media manager, social media project leader, social media designer, interactive content specialist and customer engagement manager. If a student is interested in broader aspects of digital marketing including website development, search engine optimization and measurement, there are many career options. Potential career paths could include coordinator, specialist, manager and even director roles in e-commerce, new media, website marketing, search engine optimization, web analytics, digital media, online marketing, paid
search, and digital optimization. Digital Marketing is an exciting career path with a wide assortment of career options from which to choose.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2236 - Consumer Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- VIS 1140 - Design Processes I
- BIS 1600 - Data Management \& Visualization OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- MRK 2250 - Digital Marketing Analytics


## Business Management/Entrepreneurship, AAS

Program Code: ENTR.S.AAS • Credit Hours: 60

## Description

This area of concentration within the Management degree program prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to general education courses and traditional management courses, the following key areas are emphasized: opportunities for entrepreneurs, financial plan development, marketing plan development and complete business plan development.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Students completing this degree can expect to be prepared to begin their own businesses or to work in larger companies in an entrepreneurial role.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management OR
- MRK 2135 - Digital Marketing
- MRK 2220 - Small Business Marketing
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Entrepreneurship Elective $\mathbf{3} \mathbf{C r} \mathbf{~} \mathbf{H r}(\mathbf{s})$.


## Entrepreneurship Electives

- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2225 - Sales Fundamentals


## Business Management/Supply Chain Management, AAS

## Program Code: SCM.S.AAS•Credit Hours: 60

## Description

The Business Management Supply Chain Management (SCM) concentration provides a broad-based study of organizational strategic plans, resources, roles, responsibilities and functions, while also focusing on management of supply chain activities. This study involves consideration and application of processes to develop coordinated supplier-to-customer systems, including: identifying needs for raw materials, supplies and components; developing specifications; computing quantity requirements; selecting sources and negotiating agreements; acquiring, transporting and storing inventory; managing and maintaining operations; and logistics management.

## Accreditation

This program is fully accredited by the Accreditation Council for Collegiate Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

SCM specialists have opportunities for management positions at all levels in virtually every type of business, throughout small and medium-sized businesses, corporations, industries, nonprofit organizations and government agencies. SCM involves coordinating supplier-to-customer systems, including: identifying the need for materials, computing quantity requirements, selecting sources and negotiating agreements, and logistics and transportation management.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- COM 2225 - Small Group Communication
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- HUM 1130 - Humanity \& the Challenge of Technology
- LAW 1101 - Business Law OR
- LAW 1102 - Consumer Law OR
- LAW 1104 - Employment Law
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2101 - Introduction to Supervision OR
- MAN 2140 - Human Resource Management
- MAN 2110 - Introduction to Project Management OR
- MAN 2155 - Management Information Systems
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2270 - Management Internship OR
- MAN 2279 - Business Management Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 2240 - Six Sigma: Green Belt


## Chemistry, AS

## Program Code: CHEE.S.AS • Credit Hours: 61

## Description

The Associate of Science degree in Chemistry fulfills the freshman and sophomore general education and degree-specific requirements for students transferring to programs which require General and Organic Chemistry at most four-year colleges and universities. Recipients of this degree may be able to apply for laboratory technician or research assistant positions. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Studying chemistry opens the door to a wide variety of teaching, research, industrial, clinical and service careers including health sciences, forensics, environment, manufacturing and science writing. Chemistry graduates find jobs in colleges and universities, primary and secondary schools, clinics and laboratories. Governments rely on the expertise of chemists to formulate sound policies and legislation and many non-profit organizations, businesses, and industries hire chemists who use their skills to meet the goals of the organization.

## Program Requirements

- CHE 1211-General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I
- CHE 2151 - Lab for Organic Chemistry I
- CHE 2121 - Organic Chemistry II
- CHE 2161 - Lab for Organic Chemistry II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Arts \& Humanities Elective (at least two disciplines) $\mathbf{6 C r} \mathbf{~ H r ( s ) . ~}$
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{~ H r}(\mathrm{~s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Civil Engineering Technology, AAS

## Program Code: CEGT.S.AAS • Credit Hours: 60-64

## Description

In Civil Engineering Technology, students are prepared to work as technicians in the planning, design, construction and operation of the built environment in our civilized world. A strong background in basics of architectural and civil construction and in-depth study of advanced topics such as surveying, construction management and structural analysis prepares students to produce and use construction documents and perform basic design and analysis.

## Accreditation

The Civil Engineering Technology Associate degree (CEGT) is accredited through the Engineering Technology Accreditation Commission of ABET, www.abet.org., www.abet.org

## Program Requirements

- CAT 1161 - Introduction to the Built Environment
- CAT 1211 - Construction Materials Testing
- CAT 1205 - Construction Engineering Technology
- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1401 - Construction Cost Estimating
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2301 - Land Development Design in Civil 3D
- CAT 2401 - Construction Project Management
- CAT 2421 - Soil Mechanics
- CAT 2431 - OSHA Construction Standards
- CAT 2501 - GPS \& GIS for Engineering Technology Professionals
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2701 - Civil Engineering Technology Internship
- CAT 2781 - Civil Engineering Technology Capstone
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470-College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 1200-Technical Mathematics
- PHY 1106 - Physics for Technology OR
- PHY 1141 - College Physics I
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Construction Elective $5 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Construction Electives

- CAT 1301-Civil Construction CAD
- CAT 2425 - Introduction to Structural Analysis \& Design
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management


## Communication Studies, AA

Program Code: COM.S.AA • Credit Hours: 62

## Description

Communication is the study of interactions between people in interpersonal, small group, public speaking, organizational and massmedia settings. This degree can lead to successful transfer to a fouryear college or university baccalaureate program. Through careful course selection, a program of study can be planned to satisfy a student's particular educational and career interests.
Enhancing communication skills provides invaluable benefits for all students, regardless of major. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

A communication degree can provide opportunities in journalism, speech education, business, industry, government, broadcast media, law, ministry, social services, public relations, or provide valuable communication skills to enrich any career. Through careful course selection, a program of study can be planned to satisfy your particular educational and career interests. Enhancing communication skills
provides invaluable benefits for all students, regardless of major or career path.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2220 - Introduction to Communication Theory
- COM 2225 - Small Group Communication
- COM 2278-Communication Capstone
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $\mathbf{6} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Mathematics Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathrm{s})$.
- OT36 Any Group $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Any Course in Catalog Elective $3 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- Communication/Journalism Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Communication/Journalism Electives

- COM 2230 - Nonverbal Communication
- COM 2235 - Principles of Interviewing
- COM 2245 - Intercultural Communication
- COM 2285-Organizational Communication
- COM 2286 - Public Relations Principles
- COM 2287 - Effective Listening
- JOU 2101 - Introduction to Journalism
- JOU 2203 - Reporting \& Writing for Media


## Community and Public Service, AAS

## Program Code: CPS.S.AAS • Credit Hours: 63-65

## Description

The Community and Public Service Associate of Applied Science degree is for students that are interested in helping those in need to overcome difficulties and improve their lives. This program is built from three core certificates that provide students with the necessary skills and knowledge to be effective in a wide range of social, behavioral and psychological/mental health service settings. Courses in this curriculum will focus on achieving proficiency in the following areas: social work core knowledge, mental health, addiction, values, skills; social work ethics and theory, interviewing and documentation; group/organization and micro-level methodologies; collaboration and advocacy; understanding family dynamics, barriers to self-sufficiency, conflict resolution, cultural and social diversity issues, the relationship between social problems and institutional responses.

## Career Opportunities

Graduates are employable in a variety of social service settings, including area non-profits, behavioral health clinics, Montgomery County Job and Family Services, and Dayton Children's Hospital. Some of these options are available to students if they are willing to complete a degree in Social Work within a certain time frame.

## Program Requirements

- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 1106-Transition Skills OR
- SCC 1101 - First Year Experience
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective-3 Cr. Hrs.
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2130 - Sociology of Family Violence
- SOC 2205 - Social Problems
- SOC 2226 - Criminology
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work
- OT36 Arts \& Humanities Elective - $\mathbf{3}$ Cr. Hrs.


## Computer Aided Manufacturing/CNC Technology, AAS

## Program Code: CAMCT.S.AAS • Credit Hours: 60

## Description

Graduates of the Computer Aided Manufacturing CNC certificate programs are candidates for the completion of this two-year associate degree option. Coursework includes tool and manufacturing processes, computers in engineering technology, quality control, and CNC
applications. Facilities and equipment rank among the best in the nation, with more than four million dollars in conventional machining equipment and computer numerical control machines for laboratory use by students

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Careers are available for CNC operators, Programmers and Process Improvement Specialists.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114-Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 2204 - Computer Numerical Control Lathe Programming
- CAM 2212 - Computer Assisted Programming
- CAM 2225 - Tool Design
- CAM 2780 - Computer Aided Manufacturing Capstone
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313-Coordinate Measurement
- MAT 1110 - Math for Technologists
- OT36 Arts and Humanities Elective - $\mathbf{3}$ Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective - $\mathbf{3}$ Cr. Hr.(s)
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology OR
- ISE 2240 - Six Sigma: Green Belt OR
- CAM 1180 - Welding \& Metal Joining I


## Computer Aided Manufacturing/Precision Machining, AAS

## Program Code: CAMPM.S.AAS • Credit Hours: 60

## Description

Graduates of the CAM precision machining certificate programs are candidates for completion of this two-year associate degree option. More in-depth focus is given to enhancing communication and mathematical skills. A greater development of knowledge in industrial courses is also emphasized, including such areas as tool design,
computer numerical control, jig and fixture design, process engineering and basic statistics.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student
Records at studentrecords@sinclair.edu.

## Career Opportunities

Careers are available for entry-level in the precision machining and tool-and-die industries.

Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 2225-Tool Design
- CAM 2781 - Precision Machining Capstone
- CAM 2700 - Computer Aided Manufacturing Internship
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists
- ISE 1313-Coordinate Measurement OR
- ISE 2240 - Six Sigma: Green Belt OR
- CAM 2204 - Computer Numerical Control Lathe Programming OR
- CAM 1180 - Welding \& Metal Joining I
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Computer Information Systems/Network Engineering, AAS

Program Code: NEEN.S.AAS•Credit Hours: 60

## Description

Students learn Cisco routing protocols, troubleshooting the routing protocols, components, methods and technologies required for network and Internet communications, operation of IP addressing services, network security threats and functions of common security appliances and applications, wireless network standards and components, basic switching concepts, operation of Cisco switches, Virtual Local Area

Networks (VLANs) to create logically separate networks. Sinclair is a Regional Cisco Academy.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in IT include entry-level positions such as network administrators, network security analysts and network engineers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1411 - Introduction to Networks
- CIS 1510 - Windows Client Operating System OR
- CIS 2510 - Microsoft Windows Server Operating System OR
- CIS 2731 - A+ Hardware \& Software
- CIS 2165 - Database Management
- CIS 2416 - Routing \& Switching Essentials
- CIS 2421 - Scaling Networks
- CIS 2427 - IoT Fundamentals
- CIS 2640 - Network Security
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Computer Information Systems/Secure System Administration, AAS

## Program Code: NEMA.S.AAS • Credit Hours: 61

## Description

Students are prepared in problem solving, designing and documenting programs, system and network administration, and computer operating systems. Students learn to manage and configure computers, using various operating systems, to provide critical network services to diverse clients in a secure manner. Security concepts that are vendor neutral and applicable to all system types are discussed; those concepts are then applied to specific systems using various operating systems. The overall objective, to securely and efficiently administer networked systems of client and server machines, is emphasized throughout.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Students learn to manage and configure computers, using various operating systems, to provide critical network services to diverse clients in a secure manner. Security concepts that are vendor neutral and applicable to all system types are discussed; those concepts are then applied to specific systems using various operating systems. The overall objective to configure high standards of system and network security is emphasized throughout. Increased recognition of the need for secure systems and networks has provided significantly increased opportunities for those prepared to work in this field.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120- Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment OR
- CIS 2650 - Ethical Hacker
- CIS 2640 - Network Security
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience


## Computer Information Systems/Software Development, AAS

## Program Code: SODE.S.AAS • Credit Hours: 62

## Description

Students learn software programming and system design for entry-level software development positions. Students are prepared in logical problem solving, designing and documenting programs, network administration, microcomputer and network operating systems and business applications using current computer languages.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts and network engineers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1202 - C++ Software Development
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2207 - Data Structures \& Algorithms OR
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2222 - ASP.NET with C\#
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Art and Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience


## Computer Information Systems/User Support, AAS

Program Code: USSU.S.AAS • Credit Hours: 62

## Description

Students learn hardware and software troubleshooting, personal computer and system maintenance, documentation and are prepared in logical problem solving, designing and documenting programs, computer and network operating systems and business applications using current computer languages.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Computer support specialists provide help and advice to people and organizations using computer software or equipment. Some, called computer network support specialists, support information technology (IT) employees within their organization. Others, called computer user support specialists, assist non-IT users who are having computer problems.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1510 - Windows Client Operating System
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- CIS 2427 - IoT Fundamentals
- CIS 2731 - A+ Hardware \& Software
- CIS Computer Information Systems Elective $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$

Computer Information Systems Electives

- CIS 1202 - C++ Software Development
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2212 - Java Software Development I
- CIS 2240 - Introduction to Mobile Applications
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2550 - Linux Operating System


## Computer Information Systems/Web Development, AAS

## Program Code: WEDE.S.AAS • Credit Hours: 63

## Description

Students design and develop websites and web applications and are prepared in logical problem solving, designing and documenting programs, microcomputer and network operating systems and business applications using current computer languages. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

Today the world wide web dominates much of our daily lives and there is considerable need for those with the skills needed to create, deploy and maintain web content. Nearly every retailer of any size uses dynamic web content to display and sell their products. Other businesses and industries have similar need to host dynamic content regarding their organizations on the web. Those with the skills to manage these sites will have significant opportunities ahead.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120- Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 1375 - JavaScript
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2222 - ASP.NET with C\#
- CIS 2250 - Web Site Development with php
- CIS 2268 - Structured Query Language (SQL) Programming OR
- CIS 2207 - Data Structures \& Algorithms
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$


## Computer Science, AS

Program Code: CS.S.AS • Credit Hours: 61

## Description

Course work will focus on giving students a foundational knowledge of computer science concepts such as mathematics and programming skills. Furthermore, this Associate of Science degree will provide students a much needed transfer pathway to Computer Science Bachelor Degrees at four-year universities. As part of this degree program, students must complete the requirements of theOhio Transfer 36 in order to graduate.

## Accreditation

This program is fully accredited by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

According to Ohio Bureau of Labor Information data, statewide increases of $18.1 \%$ for Software Developers; Applications, and 7.8\% for Software Developers; Systems Software, are projected between 2014 and 2024.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2207 - Data Structures \& Algorithms OR
- CIS 2266 - Python for Data Analytics
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective $\mathbf{1 8} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 9 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- Multicultural Electives $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Construction Management Technology, AAS

## Program Code: CMO.S.AAS • Credit Hours: 60-64

## Description

The Construction Management Technology program helps students develop skills related to managing the construction process including project planning and organization, safety, cost estimating, plan reading, surveying, current construction methods, modern building materials, and Building Information Modeling (BIM). Internship course is required.

## Career Opportunities

Graduates are employed as project managers, estimators, inspectors and craftsmen with residential, commercial and governmental agencies.

## Program Requirements

- CAT 1101-Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1211 - Construction Materials Testing
- CAT 1241 - Building Systems
- CAT 1401 - Construction Cost Estimating
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials
- CAT 2702 - Construction Management Technology Internship
- CAT 2782 - Construction Management Technology Capstone
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- EGV 2351 - LEED Green Associate Exam Preparation
- MAT 1110 - Math for Technologists OR
- MAT 1470-College Algebra OR
- MAT 1580 - Precalculus OR
- MAT 1200-Technical Mathematics
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PHY 1100 - Introduction to Physics OR
- PHY 1141 - College Physics I
- Construction Technology Elective $\mathbf{4} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Construction Technology Electives

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1141 - Reading Architectural Drawings
- CAT 1205 - Construction Engineering Technology
- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1301-Civil Construction CAD
- CAT 1701 - Construction Craft Skills/Concrete
- CAT 1721 - Structural Framing Systems
- CAT 1741 - Residential Electrical Systems
- CAT 1761 - Interior \& Exterior Finishes
- CAT 1781 - Construction Project
- CAT 1810 - Construction Techniques I
- CAT 1820 - Construction Techniques II
- CAT 1830 - Construction Techniques III
- CAT 1840 - Construction Techniques IV
- CAT 2201 - Architectural Visualization
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2581 - Legal Principles for Surveyors
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- MAT 2270 - Calculus \& Analytic Geometry I


## Correctional Rehabilitation, AAS

Program Code: CR.S.AAS • Credit Hours: 60

## Description

The Correctional Rehabilitation Associate of Applied Science will prepare students for a career assisting returning citizens in navigating the transition from incarceration to re-entry into the community. This program provides a broad-based study on navigating the criminal justice system as well as how to support someone in transition with their personal and professional goals. Upon completion, graduates will be qualified for careers within correctional rehabilitation that support individuals leaving incarceration and transitioning into their communities.

## Career Opportunities

Graduates of this program may find career opportunities in areas of reentry support such as rehabilitation and corrections, reentry services, community corrections, job and family services, and non-profit re-entry programming.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1106-Transition Skills
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective - 3 Cr . Hr .(s)
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology
- OT36 Arts and Humanities 3 Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr.(s)


## Creative Writing, AA

## Program Code: CRWE.S.AA • Credit Hours: 61

## Description

The Creative Writing Program is designed specifically for students interested in studying how to write original creative work, including poetry, fiction, and nonfiction. Students hone their writing skills and learn about the world of publishing in this program, as well. Graduates of this program are well-prepared to transfer to a four-year college or university to continue their studies. The curriculum fulfills the
freshman and sophomore general education requirements of most fouryear colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- ENG 2250 - Introduction to Creative Writing
- ENG 2262 - Writing to Publish

Choose three courses from:

- ENG 2255 - Poetry Writing AND/OR
- ENG 2256 - Fiction Writing AND/OR
- ENG 2257 - Creative Writing: Nonfiction AND/OR
- ENG 2259 - Novel Writing
- LIT 2220 - Introduction to Literature
- LIT 2217 - Images of Women in Literature OR
- LIT 2234 - Literature of Africa, Asia, \& Latin America OR
- LIT 2236 - African-American Literature
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $9 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- Language Elective $\mathbf{4 C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Elective 4 Cr . Hr.

- CHN 1101 - Elementary Chinese I
- FRE 1101 - Elementary French I
- GER 1101 - Elementary German I
- JPN 1101 - Elementary Japanese I
- SPA 1101 - Elementary Spanish I

Criminal Justice Science/Corrections, AAS

Program Code: CJCO.S.AAS • Credit Hours: 60

## Description

This program is designed to combine the criminal justice concepts, theories and laws with practical application techniques and modern technology skills to prepare the Criminal Justice Science student for productive employment in corrections. The corrections track maintains cutting-edge curriculum that enhances critical thinking, written and oral communications, teamwork, leadership and assessment. The curriculum includes general education requirements, theory and practice courses and educational requirements in ethics, law and the current best practices in the field of criminal justice.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at student records@sinclair.edu.

## Career Opportunities

Employment is available in the corrections field as correctional officers, security guards, county probation and parole officers, positions in commercial, school, and private security organizations, and correctional treatment specialists.

## Program Requirements

- BIO 1107 - Human Biology OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165-Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer Academy
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2270 - Criminal Justice Science Internship OR
- CJS 2295 - Criminal Justice Science Seminar
- COM 2245 - Intercultural Communication
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology


## Criminal Justice Science/Law Enforcement, AAS

Program Code: CJLE.S.AAS • Credit Hours: 63

## Description

The Associate of Applied Science Degree in Criminal Justice prepares entry-level professionals from diverse backgrounds in theoretical foundations, knowledge, skills, and practices of criminal justice operations. This study enables students to develop rational decisions and informed responses to challenges facing law enforcement and criminal justice professionals today.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice/law enforcement including those in court systems, court administration, patrol, victim services, investigation, and probation/parole.

Program Requirements

- BIO 1107 - Human Biology OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).
- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 1155 - Homeland Security Issues \& Administration
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2205 - Introduction to Criminal Investigation \& Forensic Science
- CJS 2209 - Computer Crime
- CJS 2270 - Criminal Justice Science Internship OR
- CJS 2295 - Criminal Justice Science Seminar
- COM 2245 - Intercultural Communication
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. Hr(s).
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology


## Criminal Justice/OPOTA, ATS

Program Code: CJS.S.ATS • Credit Hours: 62

## Description

The Associate of Technical Study Degree in Criminal Justice/OPOTA prepares entry-level professionals from diverse backgrounds in theoretical foundations, knowledge, skills, and practices of law enforcement operations. This study enables students to develop rational decisions and informed responses to challenges facing law enforcement and CJ professionals today and prepares them to take the OPOTA
certification assessment which allows them to seek employment as a Peace Officer in the State of Ohio.

Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu if interested. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Deputy Sheriff, Police Officer, Park Ranger, College or University Sworn Officer

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- COM 2245 - Intercultural Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective - $\mathbf{3}$ Cr. Hr.(s)
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology
- OT36 Arts and Humanities $\mathbf{3} \mathbf{C r}$. Hr.(s)
- Choose one CJS elective - $\mathbf{3}$ Cr. Hr.(s)

CJS Elective

- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105-Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 1155 - Homeland Security Issues \& Administration
- CJS 1165 - Corrections
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer Academy
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2270 - Criminal Justice Science Internship
- CJS 2295 - Criminal Justice Science Seminar


## Culinary Entrepreneurship, AAS

## Program Code: CENT.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science degree in Culinary Entrepreneurship has the right combination of Culinary, Business, and Entrepreneurship elements to meet the needs of motivated individuals that aspire to start their own restaurants and other food related businesses, to employ others, and to develop their brand recognition. Potential applications include development and oversight of businesses related to food operations in new restaurants, kiosks, food trucks, and other business models. The Culinary Entrepreneurship degree program at Sinclair College offers specialized credentials and provides content area knowledge that will allow graduates to realize their dreams of business ownership in the area of food production.

## Career Opportunities

An individual majoring in Culinary Entrepreneurship can explore the following career opportunities:
--Open Your Own Restaurant
--Start a Food Truck
--Go Virtual by considering owning Ghost Kitchen
--Become a Caterer
--Become Food Stylist
--Become a Food Consultant
--Mix Art and Science and become a Recipe Developer
--Become a Food Influencer
--Become the next TIK TOK sensation

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107-Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1129 - Restaurant Desserts
- HMT 2203 - Street Foods \& Food Trucks
- HMT 2215 - Hospitality Cost Controls
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- MRK 2220 - Small Business Marketing
- OT36 Arts \& Humanities Elective $\mathbf{3}$ Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 C r}$. Hr(s).


## Cyber Investigation Technology, AAS

## Program Code: CYIT.S.AAS • Credit Hours: 61

## Description

The Cyber Investigation Technology degree will prepare students for careers in the areas of computer network protection, managing networks and operating systems, and IT criminal investigation, which includes evidence procedures and computer forensics. The degree incorporates preparation for industry-recognized certifications, articulated credit for Law Enforcement and Corrections entities, and transfer students for four-year degree transfer opportunities.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Job titles include but are not limited to: Intelligence Analyst, IT Specialist (Government Breakout Codes 2210), Systems Administrator, Network Engineer, Information System Security Manager, Cyber Security Incident Response Specialist and Private Investigator.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 2165 - Database Management
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment
- CIS 2640 - Network Security
- CIS 2731 - A+ Hardware \& Software
- CIS 2808 - Introduction to Computer Forensics
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2209 - Computer Crime
- CJS 2295 - Criminal Justice Science Seminar
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- MAN 2150 - Management \& Organizational Behavior


## Data Analytics, AAS

## Program Code: DATA.S.AAS • Credit Hours: 65

## Description

Students will be prepared for entry-level data analytics positions requiring knowledge, setup and usage of business intelligence and data analysis solutions. Students will have the ability to extract, curate, wrangle, and visualize data in a way that is meaningful to a variety of organizations. Course work will include database concepts, data modeling, Structured Query Language (SQL), data analysis and visualization, data mining tools, mathematical and statistical techniques, project management and systems analysis. Emphasis is placed on strong communication skills necessary to interact with key stakeholders to achieve their desired objectives.

## Career Opportunities

Opportunities include positions such as Data Engineer, Data Analyst, Business Intelligence Analyst, Data Manager, Visualization Analyst, and Business Systems Analyst.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1455 - Introduction to Data Science
- MAT 2170 - Business Statistics I
- MAT 2180 - Business Statistics II
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Dental Hygiene, AAS

## Program Code: DEH.S.AAS • Credit Hours: 69

## Description

Working as part of a dental team, dental hygienists treat patients needing non-surgical periodontal therapy and radiographs, apply preventive agents, provide intra- and extra-oral exams and oral hygiene instructions. Registered dental hygienists work in private dental offices, public health settings, and in higher education. The Dental Hygiene program is designed to be completed in five (5) semesters on a fulltime basis when the student begins the technical portion of the program. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. In order to be invited into the Dental Hygiene Program all students must have a GPA of 2.7 with an overall TEAS score of 60 and a score on the sciences portion of the test of 50 . You have three opportunities to successfully take the TEAS. For any students applying under the Accelerated Admission for Academic Achievement (AAAA) you must have a GPA of 3.0 with an overall TEAS score of 65 and a science score of 55 . A student may take the TEAS test two times for consideration. In addition, you must earn an or A or B in all required biology and chemistry courses. Complete CHE 1111/CHE 1151 (Introduction to Chemistry I) or provide proof of High School chemistry with a C or better within past 5 years to the Dental Health Sciences Department.

## Accreditation

The program in Dental Hygiene at Sinclair Community College is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of Approval (without reporting requirements). The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (800) 621-8099 or (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611-2678.

## Career Opportunities

Career options may vary according to state practice act restrictions. Dental hygienists have a variety of career opportunities in a wide range of employment settings, including private practice, hospitals, HMO's, community health programs, long-term care facilities, school systems, dental product research, marketing and sales, military bases, universities and research centers.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- DEH 1102 - Introduction to Dental Hygiene AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology
- DEH 1102 - Introduction to Dental Hygiene
- DEH 1202 - Head, Neck \& Dental Anatomy
- DEH 1203 - Lab for Head, Neck \& Dental Anatomy
- DEH 1204 - Preclinical Dental Hygiene I
- DEH 1205 - Lab for Preclinical Dental Hygiene I
- DEH 1206 - Nutrition \& Oral Health
- DEH 1302 - Preclinical Dental Hygiene II
- DEH 1303 - Lab for Preclinical Dental Hygiene II
- DEH 1304 - Oral Histology \& Embryology
- DEH 1305 - Medical Emergencies in Dental Practice
- DEH 1306 - General \& Oral Pathology
- DEH 1308 - Dental Radiology
- DEH 1309 - Lab for Dental Radiology
- DEH 2402 - Clinical Dental Hygiene I
- DEH 2403 - Dental Hygiene Clinic I
- DEH 2502 - Pharmacology in the Dental Practice
- DEH 2503 - Pain Control in the Dental Practice
- DEH 2504 - Dental Hygiene Research
- DEH 2506 - Dental Materials
- DEH 2507 - Lab for Dental Materials
- DEH 2508 - Clinical Dental Hygiene II
- DEH 2509 - Dental Hygiene Clinic II
- DEH 2601 - Community Dental Health
- DEH 2602 - Clinical Dental Hygiene III
- DEH 2603 - Dental Hygiene Clinic III
- DEH 2604 - Dental Hygiene Practice
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology


## Digital Media Design, AAS

## Program Code: DMD.S.AAS • Credit Hours: 62-65

## Description

The Associate of Applied Science degree in Digital Media Design will prepare students for careers and transfer degrees in digital media. In this interdisciplinary program, students select a pathway specific to
their interest -- Video Production or Web Design. The program is creative, fast paced, and in demand by most businesses. Students will develop the knowledge and technical skills necessary to produce and design quality videos or web applications. Creativity, problem-solving and the design process are stressed. Advanced computer skills, portfolio development and job-seeking strategies are also incorporated into the curriculum.

## Career Opportunities

Graduates from this program will be able to obtain positions in the field of video production (television, internet, live broadcasts, home or other purposes) or web design (web designer and coding, user experience/user interface design, search engine optimization, and motion design).

## Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods OR
- ART 2235 - History of Photography
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 2130 - Motion Design
- VIS 2260 - Design Portfolio
- Video Production Pathway 28-30 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Web Design Pathway 28-30 Cr. $\mathbf{H r}(\mathbf{s})$.

Video Production Pathway

- AVT 1103 - Remote Pilot Ground School
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design
- VIS 2180 - Video Principles
- VIS 2190 - Video Applications I
- VIS 2200 - Video Applications II

Video Production Pathway Electives

Choose one course for Video Production Pathway elective:

- ART 2265 - Digital Color Photography I
- ENG 2256 - Fiction Writing
- MRK 2135 - Digital Marketing

Web Design Pathway

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design
- VIS 2140 - Web Principles
- VIS 2150 - Web Applications
- VIS 2170 - Web Content Management

Web Design Pathway Electives
Choose one course for Web Design Pathway elective:

- ART 2265 - Digital Color Photography I
- CIS 1375 - JavaScript
- IND 1240 - Color Theory
- MRK 2135 - Digital Marketing
- VIS 1420 - Video Production


## Early Childhood Education, AAS

Program Code: ECE.S.AAS • Credit Hours: 63

## Description

This program provides the knowledge, skills and competencies important to an entry-level teacher working with, or planning to work with, young children. The program includes the academic preparation required by the Ohio Department of Education to meet PreKindergarten Associate Teacher Licensure standards.
Students interested in completing this degree program must have a full criminal background investigation completed before enrolling in the final practicum course. A grade of " C " or better is required in all courses.

## Career Opportunities

Graduates may work as pre-kindergarten associate licensed teachers, child care center directors, infant-toddler teachers, and paraprofessionals in public schools or as school age child care coordinators.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ECE 1100 - Introduction to Early Childhood Education
- ECE 1101 - Introductory Child Development
- ECE 1200 - Observation \& Assessment
- ECE 1201 - Curriculum \& Planning
- ECE 1202 - Healthy \& Safe Environments
- ECE 2103 - Literacy, Art \& Music
- ECE 2104 - Math, Science \& Social Studies
- ECE 2105 - Professionalism in Early Childhood Education
- ECE 2200 - Families, Communities \& Schools
- ECE 2201 - Guidance of Young Children
- ECE 2302 - Infant \& Toddler Curriculum
- ECE 2301 - Early Childhood Education Practicum OR
- ECE 2303 - Early Childhood Education Practicum Part 1 AND
- ECE 2304 - Early Childhood Education Practicum Part 2
- EDU 1100 - Introduction to Education
- EDU 1105 - Individuals with Exceptionalities
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- PSY 2242 - Educational Psychology


## Electrical Construction Management, AAS

## Program Code: ECM.S.AAS • Credit Hours 60-61

## Description

This Associate of Applied Science (AAS) degree is designed for electrical apprenticeship skilled trades students, providing supervisory, management and leadership skills. Students already in programs such as NCCER, IEC, and JATC can take this AAS concurrently with their respective apprenticeship program. This degree will fulfill the needs of the electrical construction industry by providing an associate degree pathway to electrical construction management while simultaneously completing an approved apprenticeship program. Provides the necessary training for journeyman electricians to gain necessary knowledge for job site leadership positions such as electrical foreman, maintenance technician supervisor, manufacturing industry electrician, and to start/run their own contracting business.

## Career Opportunities

Careers might include electrical construction project manager, electrical superintendent, lead electrician, maintenance supervisor, estimating manager, or small business owner.

## Prerequisites

- Approval of Department


## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CAT 1431 - OSHA Construction Standards 10 Hour OR
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- EET 1181 - Electrical Construction I AND
- EET 1182 - Electrical Construction II AND
- EET 1183 - Electrical Construction III AND
- EET 1184 - Electrical Construction IV OR
- EET 1120 - Introduction to DC \& AC Circuits AND
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2110 - Introduction to Project Management
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts and Humanities $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective\  3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Electro-Mechanical Engineering Technology, AAS

Program Code: EMET.S.AAS • Credit Hours: 63-64

## Description

This program prepares students for a career in Mechatronics by combining knowledge of mechanical technology with knowledge of electrical and electronic circuits. The program prepares students to operate, test, and maintain unmanned, automated, robotic, or electromechanical equipment. The degree includes traditional classroom instruction, and hands-on laboratory experiences every semester.

## Career Opportunities

Prepares students for a career in advanced manufacturing, defense industry, semi-conductor manufacturing sector, high tech logistics/warehousing, consulting, technical sales, or related field.

Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 1198 - Digital Technology
- EET 2281 - Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2278 - Automation \& Control Capstone OR
- EGR 2279 - Mechatronics Capstone
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1131 - Personal Computer Applications for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 1301-SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process
- MET 2281 - Engineering Technology Professional Practice
- OT36 Natural and Physical Sciences Elective 4 Cr. Hr.(s).
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr.(s)


## Electroneurodiagnostic Technology, AAS

## Program Code: END.S.AAS • Credit Hours: 64-65

## Description

The associate degree program in Electroneurodiagnostic Technology prepares competent entry-level Neurodiagnostic Technologists, specializing in Electroencelphagrams (EEG) with additional expertise in the following additional areas: Evoked Potentials (EP); Intraoperative Neuromonitoring (IONM); Nerve Conduction Students (NCS) and Polysomnography (PSG), in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Electroneurodiagnostic is the allied health care profession that records, monitors, and analyzes nervous system functions to promote the effective treatment of pathologic conditions. Technologists record electrical activity arising from the brain, spinal cord, peripheral nerves, somatosensory or motor nerve systems using a variety of techniques and instruments. Technologists prepare data and documentation for interpretation by a physician. As part of the program, the students will complete a non-paid, supervised health-related practicum in a medical setting. A grade of "C" or higher is required in all program courses to remain in the program.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College's Electroneurodiagnostic Technology program is accredited by the Commission on Accreditation of Allied Health Education Program (CAAHEP:
https://www.caahep.org/Home.aspx). The Committee on Accreditation
for Education in Neurodiagnostic Technology (CoA-NDT) and CAAHEP's board of Directors recognized the programs substantial compliance with the nationally established accreditation standards. Commission on Accreditation of Allied Health Education Programs, 9355 113th St. N, \#7709 Seminole, FL 33775 Phone: 727-210-2350 Fax: 727-210-2354

## Career Opportunities

Employment may be found in hospitals, out-patient clinics and surgical centers.

Program Prerequisite(s):

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- END 1101 - Introduction to Electroneurodiagnostic Technology AND
- MAT 1470 - College Algebra OR
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics AND
- Approval of Department AND
- GPA of 2.0 and TEAS Exam


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1110 - Principles of Electrocardiography
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I OR
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- END 1101 - Introduction to Electroneurodiagnostic Technology
- END 1102 - Introduction to Electroencephalography (EEG)
- END 1182 - Lab for Intro to EEG
- END 1250 - Intermediate Electroencephalography (EEG)
- END 1260 - Basic Evoked Potentials
- END 1285 - Lab for Intermediate EEG
- END 1286 - Lab for Basic Evoked Potentials
- END 1901 - Seminar for END Practicum I
- END 1991 - Practicum Experience I for END
- END 2350 - Intraoperative Monitoring for Electroneurodiagnostic Technologists
- END 2360 - Neonatal/Pediatric Electroneurodiagnostic
- END 2386 - Lab for Neonatal/Pediatric EEG
- END 2450 - Nerve Conduction Studies
- END 2460 - Neurophysiology of Electroencephalography/Sleep Disorders
- END 2485 - Lab for Nerve Conduction Studies
- END 2550 - Fundamentals of Polysomnography
- END 2585 - Lab for Polysomnography
- END 2902 - Seminar for END Practicum II
- END 2903 - Seminar for END Practicum III
- END 2990 - Electroneurodiagnostic Capstone
- END 2992 - END Practicum II
- END 2993 - END Practicum III
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- PSY 1100 - General Psychology


## Electronics Engineering Technology, AAS

Program Code: EET.S.AAS•Credit Hours: 60-62

## Description

The Electronics Engineering Technology (EET) program provides students with exciting opportunities to put engineering technology concepts into practice. The curriculum balances instruction in theory with hands-on laboratory applications. A strong background in basics and in-depth study of advanced topics gives students careers in diversified areas, such as digital systems, microcomputers, programmable logic controllers, and analog systems. The program has modern state-of-the-art equipped laboratories and a highly qualified faculty. Those who wish to further their studies are well prepared for entry into the best four-year electronics engineering technology programs

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Accredited by Engineering Technology Accreditation Commission of ABET, Inc., www.abet.org

## Career Opportunities

Prepares graduates for careers in electronics technician troubleshooting with testing equipment and assisting engineers with design and fabrication.

## Program Requirements

- COM 2211 - Effective Public Speaking
- EET Electronics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- EET 1116 - Electronics Schematics \& Fabrication
- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155 - AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EET 2278 - Electronics Project Capstone
- EET 2281 - Programmable Logic Controllers
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1101 - English Composition I
- MAT 1580 - Precalculus OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry
- MET 2711 - Ethics for Engineering Technology Professionals
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I

Electronics Electives

- EET 2157 - Radio Frequency Identification (RFID) Technology
- EET 2257 - Radio Frequency Identification (RFID) Capstone
- EET 2270 - Electronics Engineering Technology Internship
- EET 2282 - Advanced Programmable Logic Controllers
- PHY 1142 - College Physics II


## Elementary Education, AA

## Program Code: ELEE.S.AA • Credit Hours: 62

## Description

This Associate of Arts degree program in Elementary Education is designed to serve as a transfer degree for those students interested in teacher education in Pre-K through 12th grade. All courses in this degree are Ohio Transfer 36 (OT36) courses or Transfer Assurance Guide (TAG) courses and are designed to transfer seamlessly to any state (and some private) Ohio colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

This degree will serve as a degree for students to transfer to 4 -year programs for teacher education in grades PreK-12th.

Program Requirements

- COM 2211 - Effective Public Speaking
- ECE 1101 - Introductory Child Development
- ECE 2200 - Families, Communities \& Schools
- EDU 1100 - Introduction to Education
- EDU 1105 - Individuals with Exceptionalities
- EDU 1109 - Effective Classroom Management \& Learning Environments
- EDU 1111 - Classroom Observation K-12 Field Experience
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HIS 1102 - United States History II OR
- HIS 1112 - Western Civilization II
- MAT 2415 - Mathematics for Elementary Education I
- MAT 2435 - Mathematics for Elementary Education II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 7 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (may not be PSY) $\mathbf{3 \mathbf { C r } .} \mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- PSY 2242 - Educational Psychology
- Any Course in Catalog Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$


## Emergency Medical Services, AAS

## Program Code: EMSVS.S.AAS • Credit Hours: 60-61

## Description

The Emergency Medical Services (EMS) degree is designed to augment the skills of the practicing paramedic. Paramedics are challenged with a variety of courses to increase their skill sets in areas of EMS management and out-of-hospital critical care medicine. Students will gain experience from currently practicing paramedics, fire fighters and managers. This degree allows students to capitalize on their paramedic education, positioning themselves for advancement within the fire service. A grade of " C " or better is required in all technical-level courses. Interested students should contact the EMS offices at 937-512-5338 or contact an academic advisor.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The EMT certification course meets the Ohio Division of EMS accreditation standards. The paramedic certification course meets the Ohio Division of EMS and CAAHEP accreditation standards.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidate's state licensures/ certifications - not whether the candidate is degreed. The associate degree can provide students with knowledge and skills needed to advance within an EMS career.

Program Prerequisite(s)

- EMS 1150 - Emergency Medical Technician: Lecture AND
- EMS 1155 - Laboratory for Emergency Medical Technician


## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- EMS 2100 - Applied Anatomy, Physiology \&

Pathophysiology for Emergency Medical Services Provider

- EMS 2105-Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175-Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- EMS 2300 - Critical Care Paramedic 1 OR
- EMS 2305 - Critical Care Paramedic 2 OR
- EMS 2310 - EMS Management 1 OR
- EMS 2315-EMS Management 2
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology


## Emergency Medical Services/Fire Science, AAS

Program Code: EMSFO.S.AAS • Credit Hours: 64-65

## Description

The Emergency Medical Services (EMS) Fire Science option is designed to augment the skills of the practicing paramedic. Paramedics are challenged with a variety of courses to increase their skill sets in fire technical areas. Students will gain experience from currently practicing paramedics, fire fighters and managers. This degree allows students to capitalize on their paramedic education, positioning themselves for advancement within the fire service. A grade of "C" or better is required in all technical-level courses. Interested students should contact the EMS offices at (937) 512-5338 or contact an academic adviser.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The certificates within the degree meet accreditation standards. The EMT certificate meets the Ohio Division of EMS accreditation standards. The Paramedic certificate meets the Ohio Division of EMS and the CAAHEP accreditation standards. The professional firefighting program is in compliance with all appropriate state laws/ rules.

## Career Opportunities

Careers with the fire service are beginning to change. Most departments will not require a degree for an entry level position. But departments are beginning to acknowledge the degree and give some preference for those entry level applicants with degrees. It is clear that to advance or get promotions with the fire services, degrees are needed.

## Program Prerequisite(s)

- EMS 1150 - Emergency Medical Technician: Lecture AND
- EMS 1155 - Laboratory for Emergency Medical Technician


## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for

Emergency Medical Services Provider

- EMS 2105 - Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175 - Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- ENG 1101 - English Composition I
- PSY 1100 - General Psychology
- COM 2211 - Effective Public Speaking OR
- COM 2206 - Interpersonal Communication
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Engineering and Engineering Technology University Transfer, AS

## Program Code: ESUP.S.AS • Credit Hours: 60-62

## Description

The Engineering and Engineering Technology University Transfer Associate degree programs are for students who plan to attend a fouryear college or university for a degree in Engineering Science or Engineering Technology. This program is designed to bring an entering student up to the level of a third year university student in Engineering or Engineering Technology. Course sequence is designed to transfer the basic requirements of most universities. The student is strongly advised to consult the particular school he or she will be entering as well as a Sinclair academic advisor, before signing up for any courses. Please see an academic advisor for the listing of available electives and assistance in selecting electives toward your major that will be accepted by the receiving transfer institution.

As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Students complete this program to transfer to a four-year institution to study various engineering disciplines to complete a BS degree in Engineering

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- OT36 Arts and Humanities (at least two discplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 2201 - General Physics I AND
- PHY 2207 - Lab for General Physics I OR
- PHY 1141 - College Physics I
- PHY 2202 - General Physics II AND
- PHY 2208 - Lab for General Physics II OR
- PHY 1142 - College Physics II OR
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- Engineering Technology Elective OR


## - Engineering Science Elective 24 Cr. $\mathbf{H r}(\mathbf{s})$.

Engineering Technology Electives

- CIS 1202 - C++ Software Development
- CAM 1109 - Fundamentals of Tooling \& Machining
- EET 1116 - Electronics Schematics \& Fabrication
- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1131 - Business Writing
- ENG 1201 - English Composition II
- ISE 1100 - Product Development Fundamentals
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2240 - Six Sigma: Green Belt
- MAT 1450 - Introductory Statistics
- MAT 2240 - Calculus for the Life Sciences
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 1301 - SolidWorks Basics
- MET 2101 - Thermodynamics
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics


## Engineering Science Electives

- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- CAT 1301 - Civil Construction CAD
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II AND
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I AND
- CHE 2151 - Lab for Organic Chemistry I
- CHE 2121 - Organic Chemistry II AND
- CHE 2161 - Lab for Organic Chemistry II
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2207 - Data Structures \& Algorithms
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2550 - Linux Operating System
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2131 - Engineering Digital Design
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1201 - English Composition II
- GLG 1101 - Physical Geology AND
- GLG 1111 - Physical Geology Laboratory
- GLG 1201 - Historical Geology AND
- GLG 1211 - Historical Geology Laboratory
- MAT 2170 - Business Statistics I
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- MAT 2320 - Linear Algebra
- MAT 2330 - Differential Equations \& Linear Algebra
- MAT 2570 - Discrete Mathematics
- MAT 2600 - Applied Statistics
- MEE 2101 - Statics for Engineers
- MEE 2201 - Thermodynamics for Engineers
- MEE 2301 - Strength of Materials for Engineers
- MEE 2401 - Dynamics for Engineers
- MET 1301 - SolidWorks Basics
- PHY 2210 - MATLAB for Scientists \& Engineers


## English, AA

## Program Code: ENGE.S.AA • Credit Hours: 62

## Description

The Associate of Arts in English comprises an array of literature courses that introduces students to the world of literature. Students planning to transfer to a four-year program in English or a related field will have a strong foundation based on the broad English curriculum, which also fulfills the first and second year general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II


## Choose two literature electives:

- LIT 2201 - British Literature I AND/OR
- LIT 2202 - British Literature II AND/OR
- LIT 2211 - American Literature I AND/OR
- LIT 2212 - American Literature II
- LIT 2217 - Images of Women in Literature
- LIT 2220 - Introduction to Literature
- LIT 2230 - Great Books of the Western World
- LIT 2234 - Literature of Africa, Asia, \& Latin America
- LIT 2236 - African-American Literature
- OT36 Arts \& Humanities Elective (May not be LIT course) 3 Cr. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $9 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Associate of Arts Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- Language Elective $\mathbf{4 C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Elective

Choose one course from:

- CHN 1101 - Elementary Chinese I
- FRE 1101 - Elementary French I
- GER 1101 - Elementary German I
- JPN 1101 - Elementary Japanese I
- SPA 1101 - Elementary Spanish I


## Fire Science Technology/Fire Administration, AAS

Program Code: FAO.S.AAS•Credit Hours: 63

## Description

This program provides the education and skills needed by the fire service professional to function in the emergency services field. Courses include administration, inspection, investigation, building construction, fire hydraulics and water suppression systems. Graduates are prepared to enter the workforce as firefighters, fire officers, investigators, inspectors, instructors, or continue their education in fire science or public administration.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Firefighter I, II, Fire Safety Inspector, and Fire Instructor Classes are certification courses through the Ohio Department of Public Safety. Also Firefighter I and II, Fire Instructor I and Fire Officer I and II are accredited by the National Board on Fire Service Professional Qualifications. We are currently in the process of extending ProBoard certification to Fire Instructor II, Fire Officer III and Fire Officer IV.

## Career Opportunities

In the next decade a majority of career fire service professionals with 25 plus years' service will be retiring under the State of Ohio "Deferred Retirement Option Plan (DROP)". Replacement employees will be needed to fill openings not only for entry-level positions, but promotions in the officer ranks as well.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- FST 1102 - Firefighter I
- FST 1103 - Firefighter II Transition
- FST 1120 - Fire Safety Inspector
- FST 1125 - Fire Investigation I
- FST 1403 - Live Fire Instructor
- FST 1442 - Emergency Vehicle Operator
- FST 2209 - Fire Service Instructor
- FST 2251 - Fire Officer I
- FST 2252 - Fire Officer II
- FST 2253 - Fire Officer III
- FST 2254 - Fire Officer IV
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- PSY 1100 - General Psychology
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $3 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Firefighter EMT, ATS

## Program Code: FST.S.ATS • Credit Hours: 61

## Description

The Associate of Technical Study degree includes training by the Ohio Division of Emergency Medical Services (state accrediting body) for Firefighter I, Firefighter II, Emergency Medical Technician (EMT) and the option of including Fire Inspector and HAZWOPER Technician. Sinclair College complies with all requirements as outlined by the Ohio Division of Emergency Services. Successful students will be eligible to sit for state certification testing and become licensed/certified Firefighter I, Firefighter II, EMT, Fire Inspector and HAZWOPER Technician. Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu if interested. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Students completing this program will find career opportunities in fire departments, private ambulance services, hospitals, inspection companies, and fire or emergency medical services contractor.

## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- ENG 1101 - English Composition I
- FST 1120 - Fire Safety Inspector
- FST 1125 - Fire Investigation I
- FST 1403 - Live Fire Instructor
- FST 1442 - Emergency Vehicle Operator
- FST 2209 - Fire Service Instructor
- FST 2251 - Fire Officer I
- FST 2270 - Fire Science Internship
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition OR
- FST 1104 - Firefighter II
- OT36 Arts and Humanities Elective - $\mathbf{3}$ Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective - $\mathbf{3 ~ C r}$. Hr.(s)
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective - $\mathbf{3}$ Cr. Hr.(s)


## Geography, AA

## Program Code: GEOE.S.AA • Credit Hours: 63-64

## Description

Geography is the study of Earth's landscapes, peoples, places and environments. It provides a knowledge of the Earth's physical and human systems and of the interdependency of living things and physical environments. The Associates of Arts Degree in Geography is designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs in geography or related fields. The curriculum fulfills the freshman and sophomore general education requirements for most four-year colleges and universities. In addition, the program offers a one-year certificate in Geographic Information Systems. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Ample opportunities exist for students with a degree in geography. The US Department of Labor projects "much faster than average growth in excess of $20 \%$ or more, in jobs for geographers, and other geographic professionals." A list of possible careers include: Environmental Scientist/Analyst, Natural Resource Management, Urban and Regional Planning, Education, GIS Analyst, Tourism, International Development, Marketing Analyst, Demographer, Park Ranger and Environmental Conservation. Note: Some career opportunities may require more than two years of college study.

## Program Requirements

- BIO 2225 - Ecology
- CIS 2165 - Database Management
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- GEO 1101 - Global Forces, Local Diversity
- GEO 1102 - Earth's Physical Environment
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1201 - World Regional Geography: People, Places \&

Globalization

- GEO 1209 - Map Design \& Visualization
- GEO 2210 - Advanced Spatial Analysis
- GLG 1101 - Physical Geology AND
- GLG 1111 - Physical Geology Laboratory OR
- GEO 1300 - Introduction to Weather \& Climate
- HUM 1135 - Environmental Ethics
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be HUM course) 3 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- SCC 1101 - First Year Experience
- Language Electives $8 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Geology, AS

## Program Code: GLGE.S.AS • Credit Hours: 60

## Description

The Associate of Science degree in Geology is designed for students planning to transfer to a four-year college or university and pursue a Baccalaureate Degree Program in the Earth Sciences. The curriculum approximates the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Careers in the Earth Sciences are highly diverse and in global demand. They can be found at local, state and federal levels, in private industry, and in education. Natural resource sustainability, global climate change, natural hazard management, water supply issues, and contamination remediation are continuing to be pressing, global issues that require involvement from Earth Scientists. Earth scientists also play an important role in the development of environmental policies and regulations.

## Program Requirements

- CHE 1211 - General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1251 - Lab for General Chemistry I
- CHE 1261 - Lab for General Chemistry II
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- GLG 1101 - Physical Geology
- GLG 1111 - Physical Geology Laboratory
- GLG 1201 - Historical Geology
- GLG 1211 - Historical Geology Laboratory
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- PHY 2201 - General Physics I
- PHY 2202 - General Physics II
- PHY 2207 - Lab for General Physics I
- PHY 2208 - Lab for General Physics II
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Geospatial Technology, AAS

## Program Code: GST.S.AAS • Credit Hours: 61-63

## Description

The Associate of Applied Science degree in Geospatial Technologies will prepare students for careers and transfer degrees in geographical information systems (GIS). In this interdisciplinary program, students select a pathway specific to their interest - GIS Analyst, GIS Programming Specialist, or Aerial Sensing Data Analyst. In this profession, graduates are responsible for collecting geospatial data, producing maps, analyzing spatial data, coordinating GIS projects, providing technical expertise to clients or users, and providing programming and software development expertise.

## Career Opportunities

Approximately $80 \%$ of all data have a spatial or location-based component. The geospatial industry and market for it continue to expand at a phenomenal rate. The latest Dept. of Labor statistics show more than 850,000 current geospatial workers with an additional 350,000 needed by 2018. Professionals in GIS are needed in organizations of all sizes and in almost every industry, including, agriculture, health care, retail trade, urban planning, law enforcement, defense and intelligence, natural resources, utilities, marketing, unmanned aerial systems and engineering among others.

## Program Requirements

- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- GEO 1101 - Global Forces, Local Diversity
- GEO 1102 - Earth's Physical Environment OR
- GEO 1300 - Introduction to Weather \& Climate
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1209 - Map Design \& Visualization
- GEO 1212 - Geospatial Data Acquisition \& Management
- GEO 2210 - Advanced Spatial Analysis
- GEO 2600 - Geospatial Technology Capstone OR
- GEO 2700 - Geospatial Technology Internship
- MAT 1450 - Introductory Statistics
- MAT 1470 - College Algebra
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- OT36 Arts \& Humanities Elective 3 Cr. Hr(s). OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).
- GIS Aerial Data Sensing Analyst Pathway 6-8 Cr. $\mathrm{Hr}(\mathbf{s})$. OR
- GIS Analyst Pathway 6-8 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- GIS Programming Specialist Pathway 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.


## GIS Aerial Data Sensing Analyst Pathway

- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis
- AVT 1123 - Acoustic \& CBRNE Data Analysis
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization

GIS Analyst Pathway

- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1215 - Introduction to Remotely Sensed Imagery OR
- EET 1121 - UAS Remote Sensing \& Analysis AND
- EET 1158 - Aerospace Spatial Visualization

GIS Programming Specialist Pathway

- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 1350 - Web Site Development with HTML \& CSS


## Health Information Management, AAS

## Program Code: HIM.S.AAS • Credit Hours: 62

## Description

Health Information Management (HIM) professionals are experts in the field of managing and protecting patient health information, administering computer information systems, and coding the diagnoses and procedures for health care services provided to patients in accordance with medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system.

The Health Information Management program is designed to be completed in five (5) semesters on a full-time basis. Students preferring to complete on a part-time basis may take longer than five sequential semesters. The degree program consists of open-enrollment courses and program-specific courses with limited enrollment. The open-enrollment courses may be taken prior to entry into the limitedenrollment courses. Most second-year HIM courses are limitedenrollment courses. All courses in the program are available online. To qualify for entry to limited-enrollment courses, please see the Applicant

Information packet located on the HIM program webpage. A minimum cumulative GPA of 2.0 and completion of prerequisite courses are required. A grade of " C " or higher is required in all program courses.

The curriculum includes a professional practice experience (PPE) that occurs virtually with HIM professionals. Students work online with professionals to experience HIM processes, projects, and "a day in the life". Generally, these experiences occur online during daytime business hours, however, many sessions are recorded and can be accomplished asynchronously.
.Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Health Information Management program is fully accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Upon successful completion of the HIM program, students are eligible to take the national certification exam to obtain the Registered Health Information Technician (RHIT) credential.

## Career Opportunities

Employment prospects continue to be excellent throughout the nation. HIM graduates work in hospitals, clinics, ambulatory care centers, skilled nursing facilities, rehabilitation centers, long term care facilities, mental healthcare and psychiatric facilities, home healthcare agencies, hospice facilities, physician offices, managed healthcare plans, insurance companies, law firms, colleges and universities, state and federal agencies, consulting firms, medical research institutions, and companies that market health information products and services.

## Program Prerequisite(s)

- BIO 1121 - Human Anatomy \& Physiology I AND
- HIM 1101 - Medical Terminology


## Program Requirements

- ALH 1140 - Fundamentals of Disease Processes
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1221 - Specialized Computer Applications for Health

Information Management

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 1217 - Alternative Health Records \& Registries
- HIM 2110 - Ambulatory Coding
- HIM 2144 - Quality Improvement, Statistics \& Research
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2211 - Inpatient Coding
- HIM 2233 - Healthcare Information Systems
- HIM 2252 - Professional Practice Experience
- HIM 2278 - Health Information Management Capstone
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Health Sciences Pre-Professional Studies, AS

## Program Code: PPS.S.AS • Credit Hours: 62-64

## Description

The Sinclair Health Sciences Pre-Professional Studies degree provides a flexible pathway for students interested in the following professions who wish to pursue transfer to a university program through an academic pathway* to the following Health Science Professions: Doctor of Dental Sciences, Medical Doctor, Doctor of Osteopathy, Physician's Assistant, Doctor of Pharmacy, Doctor of Physical Therapy, Doctor of Veterinary Medicine. This degree does include some patient-interaction through work-based learning or clinical practicums. *Students will be advised that different professional schools have different pre-requisites and they must consult their intended school of study to determine their best curricular pathway to complete their prerequisites. Further courses may be needed in order to meet the pre-requisites required by different programs. Communication with an Academic Adviser is strongly recommended. This list is not inclusive. Further professional program prerequisites may be identified as students indicate interest.

## Career Opportunities

This highly transferable degree has been designed for the student interested in a medical degree in one of the following fields: Doctor of Osteopathy (DO), Medical Doctor (MD), Doctor of Dental Surgery (DDS), Doctor of Veterinary Medicine (DVM), Doctor of Pharmacy (DP), Doctor of Physical Therapy (DPT), or Physician's Assistant (PA). Completion of this degree will position the student with over 60 credits toward entry to a University program as well as clinical experience in the field of interest (a requirement of many professional schools.) Working closely with an Academic Adviser, the student will be able to design their program to best fit the requirements of their intended profession and intended school of transfer.

## Program Requirements

- ALH 1102 - Basic Healthcare Practices \& Medical Scribe
- ALH 1120 - Nurse Aide Training OR
- ALH 1250 - Health Science Practicum
- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- CHE 1211 - General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I
- CHE 2151 - Lab for Organic Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HUM 1135 - Environmental Ethics OR
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (student must have two Arts/Humanities from different discplines) $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- MAT 2240 - Calculus for the Life Sciences OR
- MAT 2270 - Calculus \& Analytic Geometry I
- OT36 Natural \& Physical Sciences Elective 9 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (must be a non-PSY course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100-General Psychology


## Health Sciences, AAS

## Program Code: HS.S.AAS•Credit Hours: 64-68

## Description

The associate of applied science degree in Health Sciences provides students with a general degree in the health science field. Students with technical certificates or college credits in allied health courses can apply their credits toward the AAS. Graduates will be able to enter a health-related field, or continue their education toward a Bachelor's of Science degree at a four-year university.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SCC 1101 - First Year Experience
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I OR
- BIO 1121 - Human Anatomy \& Physiology I AND
- BIO 1222 - Human Anatomy \& Physiology II OR
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- Health Sciences Technical Elective 27 Cr. Hr(s).

Health Sciences Technical Electives

- AGR 1160 - Introduction to Agriculture Science
- ALH 1103-Test Taking Strategies
- ALH 1105 - Overview of Holistic Health
- ALH 1110 - Principles of Electrocardiography
- ALH 1113 - Clinical Phlebotomy
- ALH 1114 - Clinical Phlebotomy Practice
- ALH 1120 - Nurse Aide Training
- ALH 1121 - Acute Care Nurse Aide
- ALH 1122 - Pharmacy Technician I
- ALH 1123 - Pharmacy Technician II
- ALH 1124 - Pharmacy Technician Directed Practice
- ALH 1130 - Basic Life Support Training for Healthcare Provider
- ALH 1132 - Heartsaver First Aid, CPR \& AED
- ALH 1140 - Fundamentals of Disease Processes
- ALH 1183 - Pharmacy Technician Lab
- ALH 1250 - Health Science Practicum
- ALH 2201 - Survey of Drug Therapy
- ALH 2202 - General Pharmacology
- ALH 2220 - Pathophysiology
- BIO 1107 - Human Biology
- BIO 1111 - General Biology I
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1171 - Principles of Biology I
- BIO 1211 - General Biology II
- BIO 1222 - Human Anatomy \& Physiology II
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1272 - Principles of Biology II
- BIO 2205 - Microbiology
- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1221 - Specialized Computer Applications for Health Information Management
- BIS 1400 - Customer Service
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- CHE 1111 - Introduction to Chemistry I
- CHE 1121 - Introduction to Chemistry II
- CHE 1211 - General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 2111 - Organic Chemistry I
- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 2165 - Database Management
- CIS 2269 - Data Analytics Theory \& Solutions
- CLT 1200 - Introduction to Clinical Laboratory
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2225 - Small Group Communication
- DAS 1102 - Introduction to Dental Assisting Terminology
- DAS 1104 - Dental Assisting Techniques \& Materials I
- DAS 1108 - Dental Assisting Office Management
- DAS 1204 - Dental Assisting Techniques \& Materials II
- DAS 1206 - Dental Assisting Radiography
- DEH 1102 - Introduction to Dental Hygiene
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 1111 - Nutrition for Health \& Fitness
- DIT 1210 - Medical Terminology for Dietetics
- DIT 1525 - Human Nutrition
- DIT 1630 - Nutrition Through the Lifecycle
- DIT 1635 - Community Nutrition
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2180 - Medical Nutrition Therapy for Dietary Managers
- DIT 2190 - Dietary Managers Nutrition Clinical
- DIT 2240 - Motivational Interviewing, Nutrition Counseling \&

Communication

- DIT 2305 - Food, Culture \& Cuisine
- DIT 2310 - Lab for Food, Culture \& Cuisine
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2735 - Foodservice Retail Business Management \& MidProgram Assessment
- DIT 2740 - Retail Business Management Directed Practicum
- EFD 1102 - Dental Anatomy for Dental Auxiliaries
- EFD 1202 - Expanded Functions for Dental Auxiliaries I
- EFD 1203 - Lab for Expanded Functions for Dental Auxiliaries I
- EFD 1302 - Expanded Functions for Dental Auxiliaries II
- EFD 1303 - Lab for Expanded Functions for Dental Auxiliaries II
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- END 1101 - Introduction to Electroneurodiagnostic Technology
- END 1891 - Polysomnography Practicum
- END 2460 - Neurophysiology of Electroencephalography/Sleep

Disorders

- END 2550 - Fundamentals of Polysomnography
- ENS 1116 - Exercise Science \& Health Promotion
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 1214 - Personal \& Community Health Behavior
- ENS 2318 - Fitness Assessment \& Exercise Prescription
- ENS 2417 - Methods of Teaching
- ENS 2420 - Concepts of Lifestyle Coaching
- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1160 - Medical Office Coding Concepts
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 1217 - Alternative Health Records \& Registries
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2233 - Healthcare Information Systems
- HIM 2262 - Advanced Medical Office Coding
- HMT 1101 - Basic Culinary Skills
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- MAN 1107 - Foundations of Business
- MAS 1110 - Administrative Medical Assisting
- MAS 1130 - Reimbursement Specialist Practicum
- MAS 2210 - Medical Billing Specialist
- MAT 1120 - Business Mathematics
- MAT 1130 - Mathematics in Health Sciences
- MAT 1445 - Quantitative Reasoning
- MAT 1450 - Introductory Statistics
- MAT 1460 - Mathematics for Business Analysis
- MAT 1470 - College Algebra
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 1202 - Motivational Interviewing
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2137 - Treatment Techniques in Substance Use Disorders
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2235 - Family Dynamics of Addiction
- MHT 2253 - Issues in Chemical Dependency
- NSG 1111 - Introduction to Nursing
- NSG 1200 - Introduction to Nursing
- OTA 1111 - Introduction to Occupational Therapy Assistant
- PHI 2206 - Introduction to Ethics
- PHY 1106 - Physics for Technology
- PSY 1160 - Black Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PTA 1000 - Introduction to Physical Therapy
- RAT 1101 - Introduction to Radiologic Technology
- RAT 2640 - Computed Tomography Practicum
- RAT 2641 - Principles of Computed Tomography
- RAT 2643 - Principles of Magnetic Resonance Imaging
- RAT 2644 - Applications of Magnetic Resonance Imaging
- RAT 2645 - Magnetic Resonance Imaging Practicum
- RAT 2647 - Principles of Mammography
- RAT 2649 - Mammography Practicum
- RET 1100 - Introduction to Respiratory Care
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2205 - Social Problems
- SOC 2215 - Race \& Ethnicity
- SUT 1100 - Sterile Processing I
- SUT 1101 - Tissue Banking I
- SUT 1107 - Lab for Tissue Banking I
- SUT 1200 - Sterile Processing II
- SUT 2101 - Tissue Banking II
- SUT 2107 - Practicum for Tissue Banking II
- SWK 2207 - Anti-Oppressive Social Work
- VET 1102 - Introduction to Veterinary Technology I

VET 1120 - Introduction to Large Animal Sciences:
Handling \& Husbandry

- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2220 - Principles of Large Animal Reproduction
- VET 2225 - Principles of Large Animal Nutrition


## Heating, Ventilating, Air Conditioning \& Refrigeration (HVACR) Technology, AAS

## Program Code: HVACR.S.AAS • Credit Hours: 60

## Description

This degree is designed for entry-level students pursuing careers in the HVAC-R industries, as well as experienced technicians in need of
upgrade training. The program focuses on the basic operating principles of commercial and industrial HVAC systems, allowing one to pursue careers in sales, service, facilities operation, project management, laboratory technician, building automation, and even design. These principles are presented through lecture and laboratory exercises in a step-by-step fashion by addressing refrigeration, heating, distribution, filtration and control as individual subsystems. Upper-level courses tie the subsystems together to discuss how they interact, providing the HVAC-R technician or designer with knowledge regarding proper system operation.

## Career Opportunities

The program focuses on the basic operating principles of commercial and industrial HVAC systems, allowing one to pursue careers in sales, service, facilities operation, project management, laboratory technician, building automation, design, and many other niche and introductory technologies in HVAC.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1131 - Introduction to Revit MEP
- CAT 1601 - Building Electric \& Controls
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings
- HVA 1301 - Air \& Water Distribution Systems
- HVA 1352 - Psychrometrics, Health \& Comfort in HVAC
- HVA 1401 - HVAC Mechanical \& Electrical Troubleshooting
- HVA 2251 - Primary HVAC Equipment Operation \& Selection
- HVA 2351 - HVAC Systems \& Controls
- HVA 2780 - HVACR Engineering Technology Capstone Project
- MAT 1110 - Math for Technologists OR
- MAT 1200-Technical Mathematics
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- HVACR Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.


## HVACR Electives

- CAT 1201 - Construction Methods \& Materials
- CAT 1401 - Construction Cost Estimating
- CAT 1741 - Residential Electrical Systems
- CIS 1130 - Network Fundamentals
- CIS 1411 - Introduction to Networks
- EGV 1251 - Introduction to Energy Management Principles
- EGV 1301 - Architectural Energy Analysis
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- HVA 2297 - Special Topics
- HVA 2700 - HVACR Engineering Technology Internship
- HVA 2751 - HVAC-R Operations \& Best Practices


## History, AA

## Program Code: HISE.S.AA • Credit Hours: 61

## Description

An Associate of Arts in History introduces students to broad periods of the human experience. History, though, is more than just the study of the past. Students will also develop cultural literacy, critical thinking, and other skills that inform global citizenry. These skills can prepare students planning to transfer to a four-year college or university and pursue a baccalaureate degree in history or a related field, providing a foundation for careers in teaching, journalism, archival work, government, politics, and law. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HIS 1101 - United States History I
- HIS 1102 - United States History II
- HIS 1111 - Western Civilization I
- HIS 1112 - Western Civilization II
- HIS 1105-African-American History OR
- HIS 2218 - History of Ohio

Choose two courses from:

- HIS 2215 - Survey of African History AND/OR
- HIS 2216 - Survey of Latin American History AND/OR
- HIS 2217 - Survey of East Asian History AND/OR
- HIS 2219 - Survey of the Middle East
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be HIS course) 3 Cr.
$\mathrm{Hr}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Associate of Arts Elective $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.


## Horticulture Technician, AAS

## Program Code: HTC.S.AAS • Credit Hours: 63

## Description

The Horticulture Technician degree uses courses from existing technical certificates as well as a general education base to fulfill an educational need for horticultural studies within the Miami Valley.

## Career Opportunities

The graduates can hold jobs in greenhouses, nurseries, and landscape businesses.

## Prerequisites

- DEV 0035 and MAT 0200


## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1203 - Trees \& Shrubs
- AGR 1204 - Plant Propagation
- AGR 1205 - Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design
- AGR 1209 - Greenhouse Management Capstone
- AGR 1400 - Agriculture Internship
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- OT36 Social \& Behavioral Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Hospitality Management \& Tourism, AAS

## Program Code: HMTT.S.AAS•Credit Hours: 64

## Description

The Hospitality Management \& Tourism program prepares students for entry-level positions in restaurants, private clubs, beverage establishments, and general hospitality centers and includes skills in supervision, cost controls, purchasing and human relations. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

The hospitality/tourism industry is a broad category of fields within the service industry that includes lodging, restaurants, event planning, theme parks, transportation, cruise line, and additional fields within the tourism industry. The hospitality industry is a several billion dollar industry that mostly depends on the availability of leisure time and disposable income. It is the number one employer among service industries and is fast becoming the largest single employment category of all industries worldwide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction such as front office managers, restaurant managers, convention services managers, airline attendants, assistant managers, meeting/event planners, car rental agencies, or travel firms.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105- Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 1136 - Front Office Operations
- HMT 1137 - Hospitality Industry Computer Systems
- HMT 1139 - Housekeeping Management
- HMT 1143-Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work

Experience

- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100-Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100 - Conversational Spanish I


## Hospitality Management \& Tourism/Bakery \& Pastry Arts, AAS

## Program Code: BPAO.S.AAS • Credit Hours: 65

## Description

The baking/pastry/confection program at Sinclair Community College prepares its graduates for an exciting career as a pastry chef. Skills learned in a commercial-grade bakery kitchen include proper mixing methods, shaping/sculpting techniques, advanced baking, and the science behind it all. Students will be allowed to showcase their creativity through artisan breads, pastries, chocolate and confection displays, as well as constructing show-stopping wedding cakes. Start today and allow our certified chefs to guide you through graduation and prepare you for an exciting career.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Culinary Arts program is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEF) and by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which both are recognized by the Council on Higher Education Accreditation (CHEA). Please visit acfchefs.org, acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

Students who graduate from the baking/pastry/confectionery concentration will find employment as a baker, pastry cook, pastry chef, pastry department assistant manager, or bake shop manager.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- DIT 1108 - Nutrition for the Culinary Professional
- ENG 1101 - English Composition I
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2118 - Artisan Breads
- HMT 2126 - Cake Production \& Cake Decoration
- HMT 2200 - Baking \& Culinary Fundamentals \& Commercial Equipment OR
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2218 - Advanced Pastry Skills
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2293 - Baking \& Pastry Arts Option Cooperative Work

Experience

- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- OT36 Arts \& Humanities Elective $\mathbf{3 ~ C r . ~ H r ( s ) . ~}$
- PSY 1100-General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Hospitality Management \& Tourism/Culinary Arts, AAS

## Program Code: CAO.S.AAS • Credit Hours: 65

## Description

The Culinary Arts program provides the basic knowledge a student needs to develop into a certified chef. The serving of good food is important to the reputation of any restaurant. Chefs and cooks are responsible for preparing meals that are pleasing to the eye and taste. Through this specialized program, students develop extensive skills and knowledge of food preparation and presentation. Students also gain an understanding of the duties and responsibilities of a chef and other culinary personnel.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Culinary Arts program is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEF) and by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which both are recognized by the Council on Higher Education Accreditation (CHEA). Please visit acfchefs.org, acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

Students completing the Culinary degree would find employment as a restaurant/banquet cook, short-order cook, fast food cook, private household cook, personal chef, food preparation worker, Sous chef, baker, pastry cook, pastry chef, galley cook, executive chef, executive pastry chef, research chef, corporate chef.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- DIT 1108 - Nutrition for the Culinary Professional
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1125 - Beverage Management
- HMT 1129 - Restaurant Desserts
- HMT 2200 - Baking \& Culinary Fundamentals \& Commercial Equipment OR
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2206 - Garde Manger
- HMT 2207 - Butchery \& Fish Management
- HMT 2208 - Advanced Culinary \& Competition Skills OR
- HMT 2209 - Advanced Culinary Skills
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2292 - Culinary Arts Option Cooperative Work Experience
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts

Professional

- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Hospitality Management \& Tourism/Lodging, AAS

## Program Code: HMTTL.S.AAS • Credit Hours: 65

## Description

The Hospitality Management \& Tourism/Lodging program prepares students for positions in hotels/lodging organizations, resorts, and includes skills in supervision and human relations. This degree also encompasses a basic understanding of meeting \& events, and the costing of food since both of these are found at all mid-level and full service properties.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

The hospitality and tourism industry is the number one employer among service industries, and is vastly becoming the largest single employment category of all industries worldwide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Right now, over half a million jobs in the hospitality industry go unfilled each year, and that number is likely to continue to grow. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction as front office supervisors, front office managers, concierges, owners of bed and breakfasts, leaders in the car rental or travel agencies, tour operations, convention and visitors bureaus, and the airline industry.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1125 - Beverage Management
- HMT 1136 - Front Office Operations
- HMT 1137 - Hospitality Industry Computer Systems
- HMT 1138 - Managing Lodging Operations
- HMT 1139 - Housekeeping Management
- HMT 1141 - Destination Geography
- HMT 1143-Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 1150 - Meeting \& Event Planning
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work Experience
- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.


## Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100-Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100 - Conversational Spanish I


## Hospitality Management \& Tourism/Meeting \& Event Planning,

 AAS
## Description

The Hospitality Management \& Tourism Meeting \& Event Planning program prepares students for entry-level positions in hotels, resorts, convention and visitor centers, corporate centers, private clubs, and meeting and event operations.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

The hospitality/tourism industry is the number one employer among service industries, and is fast becoming the largest single employment category of all industries worldwide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Right now, over half a million jobs in the hospitality industry go unfilled each year, and that number is likely to continue to grow as the food service industry grows. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction as meeting/event planners for corporate events, association/non-profit events, government events, special events and expositions and largescale convention business.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 1141 - Destination Geography
- HMT 1143-Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 1150 - Meeting \& Event Planning
- HMT 1151 - Special Events, Expositions \& Festivals
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work

Experience

- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100 - Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100-Conversational Spanish I


## Industrial \& Systems Engineering Technology, AAS

## Program Code: OPTIO.S.AAS • Credit Hours: 63-64

## Description

The Industrial and Systems Engineering Technology (ISET) program prepares individuals for leadership roles in the operations of business, industry, and service organizations with a special emphasis on ISET skills. Students learn analysis, continuous improvement, quality assurance, and problem-solving techniques that can be applied in financial, health care, manufacturing, and service/retail fields. Students take part in lecture-lab structured courses and hands-on demonstrations of course principles, assuring that they will gain practical knowledge as well as the fundamentals. Those who wish to further their studies may transfer to four-year colleges and universities.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Graduates are employed as Industrial and Systems Engineering Technicians, Quality Control Technicians, Production Supervisors, Continuous Improvement Specialists, and similar positions. Those who wish to further their studies may transfer to four-year colleges and universities.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2210 - Methods Engineering
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2250 - New Product Realization
- ISE 2260 - Work Flow \& Facility Design
- ISE 2700 - Industrial \& Systems Engineering Technology Internship OR
- ISE 2780 - Industrial \& Systems Engineering Technology Capstone
- MAN 2110 - Introduction to Project Management
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- PHY 1141 - College Physics I
- Industrial \& Systems Engineering Technology Electives 3 Cr. Hrs.

Industrial \& Systems Engineering Technology Electives

- ISE 1100 - Product Development Fundamentals
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- ISE 1310 - Advanced Metrology \& Gauging
- ISE 1313 - Coordinate Measurement
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- ISE 2240 - Six Sigma: Green Belt
- ISE 2310 - Quality Assurance
- ISE 2360 - Quality Management Systems \& Auditing


## Interior Design, AAS

## Program Code: IND.S.AAS Credit Hours: 64

## Description

The program prepares students for careers in the creative, detailoriented field of interior design. Students will develop the knowledge and technical skills necessary to design an interior. Developing floor plans and selecting and coordinating colors, floor and wall coverings are common tasks performed by interior designers. They also place furniture, fixture and cabinetry, and prepare drawings, cost estimates and contracts. Sustainability, building codes, the ADA and basic business practices are included, as well as the development of individual design portfolios.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

Interior design graduates typically pursue careers as designers or consultants in design studios, architecture firms or commercial retailers. Some graduates choose to continue their education in design or a related field at a four-year institution.

## Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods
- CAT 1101 - Architectural Graphics I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2130 - Non-Residential Design
- IND 2135 - Rendering
- IND 2140 - Sustainable Design
- IND 2260 - Interior Design Portfolio
- MRK 2145 - Principles of Retailing OR
- MRK 2225 - Sales Fundamentals
- PSY 1100 - General Psychology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Interior Design Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.

Interior Design Electives

- ART 1101 - 2-D Foundations
- ART 1102 - 3-D Foundations
- ART 1111 - Drawing I
- ART 1141 - Introduction to Ceramics
- ART 1161 - Black \& White Darkroom Photography I
- ART 2230 - Art History: Ancient through Medieval Periods
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- CAT 1121 - Architectural Graphics II
- CAT 1141 - Reading Architectural Drawings
- CAT 1201 - Construction Methods \& Materials
- CAT 2741 - Current Topics in Architecture
- IND 2280 - Kitchen \& Bath Design
- VIS 1180 - History \& Theory of Graphic Design
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production
- VIS 2270 - Design Internship


## Internet of Things (IoT) Cyber Technician, AAS

## Program Code: CETT.S.AAS • Credit Hours: 63-64

## Description

The Internet of Things Cyber Technician (IOTCT) program provides students with the skills and education to apply the Internetof- Things (IOT) and programming concepts in the exciting fields of automation, robotics and cyber/network security. The curriculum balances theory and laboratory applications and provides students with a strong background in electronics, programmable logic controllers, robots, robotic programming, networking, and cybersecurity. These in-demand skills prepare graduates for careers in logistics, supply chain, automation, repair/support of existing computer systems, networks, and their associated software which utilize robots and/or automated systems. The IOTCT program provides students a quality education in state-of-the-art laboratories with courses taught by highly qualified faculty who possess industry experience. Those who wish to further their studies are well prepared to pursue a bachelor's degree in Computer Engineering or Electronics and Computer Engineering Technology programs.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Entry level Cyber technician specializing in the IoT consumer market provides students with in-demand skills in electronics, programmable logic controllers, robots, robotic programming, networking, troubleshooting, and cybersecurity. Graduates will be able to work in all areas having to do with the IoT (Internet-of- Things) from programming to engineering hardware installations, medical devices, robotics, supply chain/logistics, and networking/ cybersecurity.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals OR
- CIS 1411 - Introduction to Networks
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2640 - Network Security
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2252 - Teach Pendant Robot Programming
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1101 - English Composition I
- MAT 1580 - Precalculus OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- PHY 1141 - College Physics I


## Interpreter Education, AAS

## Program Code: ASL.S.AAS • Credit Hours: 65

## Description

The Interpreter Education program provides the unique opportunity for students to develop a solid foundation in language, linguistics, culture and interpretation and to master the skills necessary to successfully function as an interpreter for Deaf, Hard of Hearing, and DeafBlind individuals in a variety of educational and community settings. Students will gain rich insights into the American Deaf community, their beliefs, values, history, rights and cultural norms. A grade of "C" or better is required in all ASL courses.

## Accreditation

This program holds accreditation by the Ohio Department of Education. Graduates are eligible to apply for the Interpreter for the Hearing Impaired Five-Year Associate Licensure.

## Career Opportunities

Employment opportunities are available in areas such as educational, community interpreter referral agencies, business, medical, legal, theatrical, governmental and religious interpreting settings.

## Program Prerequisite(s)

- DEV 0035 - Integrated Developmental Reading \& Writing II


## Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1102 - Interpreting Theory \& Best Practices
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 1228 - Intermediate American Sign Language I
- ASL 1229 - Intermediate American Sign Language II
- ASL 2201 - Interpreting I
- ASL 2202 - Interpreting II
- ASL 2203 - Interpreting III
- ASL 2207 - Role of the Interpreter
- ASL 2212 - Specialized Interpreting I
- ASL 2213 - Specialized Interpreting II
- ASL 2231 - Advanced American Sign Language I
- ASL 2236 - Transliterating \& Signing Modalities
- ASL 2261 - Practicum I
- ASL 2262 - Practicum II
- ASL 2300 - Educational Interpreting
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- PSY 1100 - General Psychology
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Legal Studies, AAS

## Program Code: PAR.S.AAS • Credit Hours: 61

## Description

The Legal Studies program educates students with practical assignments in a simulated law office environment. All student work models the professional, ethical and technology concepts they will use in the legal field. Student learning is supported by experienced paralegals who serve as team teachers. All legal studies students are required to complete an attorney-supervised internship for hands-on experience using their paralegal skills.

Classes are taught in a simulated law office environment that makes current practices and technology available to students. All full-time faculty in the Legal Studies program are licensed attorneys. Legal research is conducted by students both online and in professional law libraries. All students produce a personal portfolio of their legal work and benefit from an internship experience under the supervision of a licensed attorney.

A grade point average of 2.0 is required to enter the Paralegal program. A grade of " C " is required in all PAR courses. An overall grade point average of at least 2.0 is required to continue in the program, and is required for graduation. Students must take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Accreditation

The Legal Studies Program is approved by the American Bar Association, and fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation. All fulltime faculty in the Legal Studies Program are licensed attorneys. Sinclair is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools. Programs of study are approved by the Ohio Board of Regents. Completion of the Legal Studies Program does not authorize a graduate to practice law as an attorney, or to give legal advice.

## Career Opportunities

Graduates may find work in large and small law firms, the business world, courts and government agencies. Under the supervision of a lawyer, a professional paralegal may perform such interesting duties as investigating cases, interviewing clients and witnesses, preparing legal documents and legal research. These responsibilities are carried out in a variety of legal fields, such as criminal law, probate, family law, litigation and real estate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1199 - Textual Editing
- ENG 1201 - English Composition II
- LAW 1101 - Business Law
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PAR Legal Studies Elective $\mathbf{6 C r}$. $\mathbf{H r}(\mathbf{s})$.
- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2401 - Legal Studies Internship
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- RES 1201 - Real Estate Law

Legal Studies Electives

- CJS 1105 - Criminal Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- PAR 2507 - Legal Interviewing Skills
- PAR 2511 - Online Legal Research


## Manufacturing Technology, AAS

## Program Code: MFGT.S.AAS • Credit Hours: 60-62

## Description

This program prepares students for a career in Manufacturing by developing an understanding of manufacturing processes and how to implement and improve these processes in the areas of Mechanical and Industrial \& Systems Engineering Technology, Automation, and Advanced Manufacturing. The degree includes traditional classroom instruction and "hands-on" laboratory experience. The first year of study contains an embedded 31-credit hour certificate, Basic

Manufacturing. The student may also achieve the Industry Recognized MSSC Certified Production Technician Certificate in the first year. The second year of study will culminate in an AAS degree in one of five certificate pathways. These pathways include General Manufacturing, Advanced Manufacturing, Automation Technology, Mechanical Engineering Technology, Industrial \& Systems Engineering Technology and Digital Thread Technology.

## Career Opportunities

Careers from entry-level to mid-level are possible in these fields General Manufacturing, Advanced Manufacturing, Automation Technology,
Mechanical Engineering Technology, and Industrial \& Systems Engineering Technology.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- COM 2211 - Effective Public Speaking
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering

Technology

- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- OT36 Arts and Humanities Elective - 3 Cr. Hr.(s)
- Choose one pathway - 14-16 Cr. $\mathrm{Hr}(\mathrm{s})$.

General Manufacturing
Advanced Manufacturing
Automation Technology
Mechanical Engineering Technology
Industrial and Systems Technology
Digital Thread

General Manufacturing

- CAM 1142 - Advanced Shop Floor Math
- CAM 2145 - Shop Floor Programming
- EET 1120 - Introduction to DC \& AC Circuits
- ISE 2240 - Six Sigma: Green Belt
- MET 2151 - Material Science

Advanced Manufacturing

- CAM 1110 - Advanced Machine Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 1214 - Computer Numerical Control Mill Programming OR
- CAM 2204 - Computer Numerical Control Lathe Programming

Automation Technology

- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1144 - Sensors \& Vision Systems

Mechanical Engineering Technology

- MET 1301 - SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process
- MET 2151 - Material Science

Industrial and Systems Technology

- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2210 - Methods Engineering
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt

Digital Thread

- BIS 1010 - Digital Thread Data Management
- CIS 1010 - Digital Thread Cyber Security
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- MAN 1010 - Digital Thread Enhanced Logistics


## Math Education, AA

Program Code: MED.S.AA • Credit Hours: 62

## Description

This program is for students who wish to pursue teaching mathematics in grades 7-12. The course content includes mathematics and education courses that students need during the first two years of a bachelor's degree program in Math Education. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

With a completed bachelor's in Math Education students will be able to be a Math Teacher in grades 7-12.

- COM 2211 - Effective Public Speaking
- EDU 1100 - Introduction to Education
- EDU 1103 - Educational Technology OR
- SOC 2210-Cultural Humility for Working with Youth
- EDU 1105 - Individuals with Exceptionalities
- EDU 1109 - Effective Classroom Management \& Learning Environments
- EDU 1111 - Classroom Observation K-12 Field Experience
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II OR
- MAT 2320 - Linear Algebra
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- PSY 1100-General Psychology
- PSY 2242 - Educational Psychology
- OT36 Social \& Behavioral Sciences Elective (may not be PSY course) $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective $6 \mathbf{C r}$. Hr(s).


## Mathematics, AS

## Program Code: MATE.S.AS • Credit Hours: 60-62

## Description

The curriculum of the Associate of Science in Mathematics degree is designed to correspond to both the math and general education courses that a student would take in the first two years of pursuing a Bachelor's degree in math at a four-year institution. Coursework can be customized to fit interests in Statistics/Actuarial Science, Secondary Math Education, or Pure/Applied Mathematics. Students will get a solid grounding in the mathematics that is applied in the physical science and engineering disciplines, and an introduction to more theoretical mathematics. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Actuary, Statistical Consultant, Investment Analyst, Cryptographer, Operations Researcher, High School or College-Level Teacher. Visit www.maa.org/careers/career-profiles for more examples. For more information on these and other careers, including employment outlook and working conditions, go to www.ohcis.intocareers.org and login with username "sinclaircoll" and password "ohiocis03".

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations OR
- MAT 2600 - Applied Statistics AND
- Any Course in Catalog OR
- CIS 1111 - Introduction to Problem Solving \& Computer Programming AND
- CIS 2212 - Java Software Development I AND
- Any Course in Catalog
- MAT 2320 - Linear Algebra OR
- CIS 2217 - Java Software Development II
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.

Hr(s).

- OT36 Natural \& Physical Sciences Elective 10 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Mechanical Engineering Technology, AAS

## Program Code: MEGT.S.AAS•Credit Hours: 60-62

## Description

The Mechanical Engineering Technology program provides the courses needed to begin a career as a technician in the engineering field. As a mechanical engineering technology graduate, career options are open in a diverse number of fields and companies. Students will complete relevant and practical coursework taught by knowledgeable faculty. The courses are non-calculus based, and electives can tailor the degree to an individual's needs.

## Career Opportunities

Graduates may enter a variety of industries in entry-level positions doing conceptual design, systems engineering, manufacturing, product research and development, or related technical work.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 2101 - Thermodynamics
- MET 2151 - Material Science
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2281 - Engineering Technology Professional Practice
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics
- MET 2401 - Machine Design
- MET 2780 - Mechanical Engineering Technology Capstone
- OT36 Social and Behavioral Sciences Elective 3 Cr. Hr(s).
- PHY 1141 - College Physics I
- Mechanical Engineering Technology Elective 6-7 Cr. $\mathbf{H r}(\mathbf{s})$.


## Mechanical Engineering Technology Electives

- AUT 1108 - Automotive Engine Systems
- AUT 1116 - Automotive Steering \& Suspension Systems
- AVT 1106 - Airframe Safety Systems
- AVT 1113 - Drawings for Aviation
- AVT 2138 - Engine Fuel \& Fuel Metering
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1116 - Fundamentals of Computer Numerical Control

Operations

- CAM 1180 - Welding \& Metal Joining I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1217 - Fluid Power \& Control
- EGV 1101 - Alternate \& Renewable Energy Sources
- EGV 1251 - Introduction to Energy Management Principles
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 2240 - Six Sigma: Green Belt
- MET 1151 - Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process
- MET 2700 - Mechanical Engineering Technology Internship
- PHY 1142 - College Physics II
- PHY 2210 - MATLAB for Scientists \& Engineers


## Medical Assistant Technology, AAS

## Program Code: MAS.S.AAS • Credit Hours: 60

## Description

Medical assistants are multi-skilled professionals who assist physicians with the administrative and clinical aspects of patient care. The Medical Assistant Technology degree is designed to be completed in four (4) semesters on a full-time basis. The degree consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all degree courses. The
student will be required to complete 210 hours of unpaid supervised practicum during their third semester of the program. Note: A Healthcare Professional CPR, Health Certificate, Immunizations, Student Health Insurance, and background check must be completed prior to enrolling in the practicum component of the curriculum. The graduate is eligible to sit for a national exam to become a credentialed medical assistant.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College's Medical Assistant certificate program is accredited the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).
Commission on Accreditation of Allied Health Education Programs, 9355 113th Street N., \#7709, Seminole, FL 33775

## Career Opportunities

Currently Medical Assistant Technology is one of the fastest growing occupations in the United States. Options for individuals seeking medical services and treatment: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMOs), multi-physician group practices and medical specialty clinics have opened new career opportunities.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1107 - Core Concepts of Public Health
- ALH 1140 - Fundamentals of Disease Processes
- ALH 2201 - Survey of Drug Therapy
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1102 - Clinical Medical Assisting I
- MAS 1103 - Clinical Medical Assisting II
- MAS 1110 - Administrative Medical Assisting
- MAS 1130 - Reimbursement Specialist Practicum
- MAS 1192 - Lab for MAS 1102
- MAS 1193 - Lab for MAS 1103
- MAS 2201 - Clinical Medical Assisting III
- MAS 2210 - Medical Billing Specialist
- MAS 2220 - MAS Practicum
- MAS 2291 - Lab for MAS 2201
- MAS Medical Assistant Technology Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective 3 Cr . $\mathrm{Hr}(\mathrm{s})$.
- PSY 1100-General Psychology
- SOC 1101 - Introduction to Sociology

Medical Assistant Technology Electives

- ACC 1210 - Introduction to Financial Accounting
- BIO 2205 - Microbiology
- BIS 1120 - Introduction to Software Applications
- BIS 1221 - Specialized Computer Applications for Health

Information Management

- CIS 1107 - Introduction to Operating Systems
- CIS 1160 - Introduction to Data Literacy
- COM 2235 - Principles of Interviewing
- COM 2285 - Organizational Communication
- DIT 1108 - Nutrition for the Culinary Professional
- DIT 1525 - Human Nutrition
- ECO 1100 - Introduction to Economics
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory
- HIM 2262 - Advanced Medical Office Coding
- LAW 1101 - Business Law
- MAN 2110 - Introduction to Project Management
- MHT 1101 - Introduction to Mental Health Services
- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2200 - Lifespan Human Development
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2228 - Industrial Organizational Psychology
- SOC 1108 - Appalachian Families
- SOC 1160 - Sociology of Aging
- SOC 2215 - Race \& Ethnicity
- SWK 1206 - Introduction to Social Work


## Medical Laboratory Technology, AAS

## Program Code: CLT.S.AAS • Credit Hours: 60-64

## Description

The associate degree program in Medical Laboratory Technology prepares students to enter the workforce as Laboratory Technicians. In this profession, graduates are responsible for performing routine clinical laboratory tests as the primary analysis, making specimen oriented decisions on predetermined criteria, including a working knowledge of critical values. As part of the program, the students will complete a non-paid, supervised health-related practicum in a hospital lab setting.

This degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage.

Students will have a maximum of three opportunities to successfully complete BIO 1121, ALH 1101, and all general education courses required by the program. All course withdrawals (W) or failures (D) or (F) will countas an attempt. After a third unsuccessful attempt, the student is no longer eligible to enter or continue in the program.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Sinclair Community College's Clinical Laboratory Technology associate degree program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 66018; P:773.714.8880; naaclsinfor@naacls.org

## Career Opportunities

Laboratory Technicians perform highly technical diagnostic tests in medical or scientific laboratories. Lab technicians might collect samples, study and perform tests on body fluids, chemical compounds and biological specimens. Lab techs use various types of lab equipment and complex computer programs to perform their tests.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I OR
- BIO 1121 - Human Anatomy \& Physiology I AND
- Approval of Department AND
- 2.7 cumulative grade point average or greater is required for
admission to the program and to begin technical studies AND
- Completion of Test of Essential Academic Skills (TEAS) required AND
- Students have a maximum of three opportunities to successfully complete BIO and MAT courses. Students may withdraw or fail, but must successfully complete the course on or before the third attempt. Students are ineligible for admission to the Clinical Laboratory Technology Program after a third unsuccessful course attempt.


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2220 - Pathophysiology
- BIO 1171 - Principles of Biology I
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II OR
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- CHE 1151 - Lab for Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I OR
- CHE 1121 - Introduction to Chemistry II AND
- CHE 1161 - Lab for Introduction to Chemistry II OR
- CHE 1221 - General Chemistry II AND
- CHE 1261 - Lab for General Chemistry II OR
- CLT 1200 - Introduction to Clinical Laboratory
- CLT 1203 - Lab for Introduction to Clinical Laboratory
- CLT 2110 - Urine \& Body Fluid Analysis/Immunology/Serology
- CLT 2113 - Lab for Urine \& Body Fluid

Analysis/Immunology/Serology

- CLT 2210 - Hematology
- CLT 2213 - Lab for Hematology
- CLT 2310 - Clinical Chemistry
- CLT 2313 - Lab for Clinical Chemistry
- CLT 2410 - Clinical Microbiology/Parasitology
- CLT 2413 - Lab for Clinical Microbiology/Parasitology
- CLT 2510 - Immunohematology
- CLT 2513 - Lab for Immunohematology
- CLT 2810 - CLT Practicum
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1450 - Introductory Statistics
- PSY 1100 - General Psychology


## Mental Health Services, AAS

## Program Code: MHT.S.AAS • Credit Hours: 65

## Description

The Mental Health Services degree prepares entry-level mental health professionals as members of an inter-disciplinary team under clinical supervision. Duties may include client interviewing, crisis intervention, advocacy, group facilitation and case management. The Mental Health Services degree can be completed on a full-time or part-time basis. If enrolled full-time, it is designed to be completed in five (5) semesters. This degree consists of open enrollment courses (general education and division specific) and program specific courses restricted to majors. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry in to limited enrollment MHT courses, students must have a 2.0 cumulative GPA, a grade of C or higher in all program courses and complete MHAS Online Orientation and an initial faculty advising appointment while enrolled in MHT 1101 Introduction to Mental Health Services. The practicum portion of the curriculum provides 420 hours of supervised clinical experience.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Graduates can work as mental health technicians, chemical dependency counselor assistants, social work assistants, case managers and several other jobs in hospitals or or mental health treatment settings.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1111 - General Biology I
- ENG 1101 - English Composition I
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 1201 - Interviewing Skills
- MHT 1202 - Motivational Interviewing
- MHT 1203 - Professional Documentation
- MHT 2105 - Mental Health Treatment Methods
- MHT 2111 - Group Dynamics I
- MHT 2121 - Practicum I
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2211 - Group Dynamics II
- MHT 2222 - Practicum II
- MHT 2245 - Mental Health \& the Family
- MHT 2250 - Child \& Adolescent Mental Health
- PSY 1100 - General Psychology
- PSY 1160 - Black Psychology
- PSY 2217 - Abnormal Psychology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Modern Languages, AA

## Program Code: FORE.S.AA • Credit Hours: 60-62

## Description

The Associate of Arts in Modern Languages is designed for students who are planning to transfer to a four-year university as a Chinese, French, German, Japanese, or Spanish major, or into a major for which modern language is a strong base. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathrm{~s})$.
- OT36 Any Group 9 Cr. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- First-year Language Electives $\mathbf{8 \mathbf { C r } . \mathbf { H r } ( \mathbf { s } ) \text { . }}$


## Student may choose either the second year of the same foreign language or the first year of a different foreign language:

- Second-year Foreign Language Electives $\mathbf{8} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$. OR
- First-year Language Electives 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.


## Multimedia Journalism, AA

## Program Code: COMMJ.S.AA • Credit Hours: 61

## Description

Communication is the study of interactions between people in interpersonal, small group, public speaking, organizational and massmedia settings. The Multimedia Journalism degree is a collaboration of the Communication, Journalism and Visual Communication programs. Multimedia journalism is presently the fastest growing area of journalism. It will also prove valuable for students who plan to transfer to a four-year college or university baccalaureate program to continue their studies in journalism or mass communication. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Multimedia journalism is the fastest growing area of journalism, and this degree prepares students to work as producers for news and corporation websites. Students may also elect to transfer to a fouryear college or university baccalaureate program to continue their studies in journalism or communication.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2225 - Small Group Communication
- COM 2278 - Communication Capstone
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- JOU 2101 - Introduction to Journalism
- JOU 2203 - Reporting \& Writing for Media
- JOU 2270 - Journalism Internship
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two discplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Any Group 6 Cr. Hr(s).
- SCC 1101 - First Year Experience


## Description

The Associate of Arts in Music is designed for students who will be transferring to a four-year institution for further studies upon graduation in music education, music performance, or any baccalaureate program in music. The A.A. curriculum fulfills the requirements of the first two years of a bachelor of music, with special emphasis on public performance. An audition is required upon entering the program and a solo recital is required before graduation. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MUS 1110 - Music Technology for Music Majors
- MUS 1111 - Music Theory I
- MUS 1112 - Aural Skills I
- MUS 1113 - Music Theory II
- MUS 1114 - Aural Skills II
- MUS 2111 - Music Theory III
- MUS 2112 - Aural Skills III
- MUS 2113 - Music Theory IV
- MUS 2114 - Aural Skills IV
- MUS 2117 - Survey of Musical Styles I
- MUS 2118 - Survey of Musical Styles II
- MUS Applied Instrument Elective $\mathbf{8 C r} \mathbf{~ H r ( s )}$.

Student must take the appropriate major ensemble from the following:

- MUS 2231 - Chorale for Majors OR
- MUS 2241 - Music Practicum for Majors OR
- MUS 2243 - Concert Band for Majors OR
- MUS 2245 - Classical Guitar Ensemble for Majors

Secondary Instrument (piano students must take
voice while all other student must take piano):

- MUS 1115 - Piano for Music Majors I AND
- MUS 1116 - Piano for Music Majors II AND
- MUS 2115 - Piano for Music Majors III AND
- MUS 2116 - Piano for Music Majors IV OR
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice
- OT36 Arts and Humanities Elective (at least two disciplines and may not include MUS 1121) $6 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathrm{s})$.


## Nursing, AAS

Music, AA

## Program Code: NUR.S.AAS • Credit Hours: 65

## Description

The Nursing program prepares students to meet the health needs of a diverse population in a variety of dynamic community environments. The curriculum is divided among nursing theory, nursing clinical practice, general education, and the sciences, where students participate in classroom, laboratory, and clinical experiences. Graduates of the program are eligible to take the NCLEX-RN for licensure.

The Nursing program is designed to be completed in five (5) semesters on a full-time basis. The curriculum may be taken on a part-time basis, but the nursing courses must be taken in sequence. This degree program consists of open enrollment courses (general education and division-specific) and program-specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. Details on eligibility for the limited enrollment courses can be found online in the Nursing Student Handbook.

Sinclair offers advance placement into the nursing program for qualified Licensed Practical Nurses (LPNs) or equivalent military experience and transfer students. After successful completion of the transition courses (NSG 1700 and NSG 1750), students will receive articulated credit for ALH 1101 , NSG 1400, NSG 1450, NSG 1600, and NSG 1650. Additionally, NSG 1200 and the science elective will be waived. Those students will continue to NSG 2400/2450. Students transferring from other nursing programs must meet the criteria outlined in the online Nursing Student Handbook.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether the student may enroll.

## Accreditation

The Associate Degree Nursing (ADN) program is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN), 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326, (404) 9755000 , and approved by the State of Ohio Board of Nursing.

## Career Opportunities

Registered nurses have a variety of employment opportunities.
Workplace settings may include hospitals, extended care and long-term care facilities, rehabilitation programs, physicians' offices, home health agencies and various types of clinics and outpatient services.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective AND
- NSG 1200 - Introduction to Nursing AND
- High School Diploma or equivalency AND
- GPA 2.5 or greater AND
- Proficiency on all four areas of the Test of Essential Academic Skills (TEAS) exam AND
- Nurse Aide training course or equivalent work experience AND
- Restricted to Majors


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2202 - General Pharmacology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology OR
- CHE 1111 - Introduction to Chemistry I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- NSG 1200 - Introduction to Nursing
- NSG 1400 - Health \& Illness I: Foundational Concepts in Nursing
- NSG 1450 - Professional Nursing I: Introduction to the Role of the Professional Nurse
- NSG 1600 - Health \& Illness II: Health \& Wellness Concepts
- NSG 1650 - Professional Nursing II: Healthcare System Concepts
- NSG 2400 - Health \& Illness III: Health \& Wellness Concepts
- NSG 2450 - Professional Nursing III: Leadership \& Management of Care
- NSG 2600 - Concept Synthesis
- PSY 1100 - General Psychology


## Nutrition and Dietetics Technician, AAS

## Program Code: DIT.S.AAS • Credit Hours: 60-61

## Description

Graduates of the Nutrition and Dietetics Technician (DIT) program are trained food and nutrition practitioners that work under the supervision of a registered dietitian nutritionist (RDN). As an integral member of the health care and food service management teams, they influence food choices and lifestyles to promote optimal health. The program consists of five major domains that include clinical, community, education, management and foodservice systems. It is designed to be completed in five (5) consecutive semesters on a full-time basis. Some students elect to attend on a part-time basis, extending the length of study to three academic years. The curriculum consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The limited enrollment coursework includes 630 hours of unpaid directed practice experiences at area community, food service and health care facilities. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the program webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all program courses. Students of Sinclair's Nutrition and Dietetics Program are eligible to become members of the Academy of Nutrition and Dietetics (AND), a nationally recognized organization located at 120 South Riverside Plaza, Suite 2190, Chicago Illinois 60606, 1-800-877-1600, www.eatright.org. This specially designed program enables students to enjoy benefits of student AND
membership while attending school. Graduates are eligible for active AND membership. Benefits include networking, professional growth, educational enrichment, and developing leadership skills. The graduate is eligible to take the National Credentialing Exam to become a Nutrition and Dietetics Technician, Registered (NDTR).

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Dietetic Technician program is fully accredited by the Accreditation Council on Education for Nutrition and Dietetics (ACEND) of the Academy on Nutrition and Dietetics (AND). It is also approved by the Association of Nutrition and Food Professionals (ANFP).

## Career Opportunities

Nutrition and Dietetic technicians, registered (NDTRs) work independently or in teams with registered dietitian nutritionists (RDNs) in a variety of employment settings, including health care (hospitals, nursing homes, retirement centers, home health care programs), foodservice (schools, day-care centers, correctional facilities, restaurants, health care facilities, corporations and hospitals), community/public health (public health agencies, health clubs, weight management clinics and community wellness centers) and business and industry (food companies, food vending and distributing operations).

## Program Prerequisite(s)

- MAT 0100 - Algebra I AND
- DEV 0035 - Integrated Developmental Reading \& Writing II AND
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession AND
- DIT 1525 - Human Nutrition


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- BIO 1108 - Lab for Human Biology
- COM 2206 - Interpersonal Communication
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 1210 - Medical Terminology for Dietetics
- DIT 1525 - Human Nutrition
- DIT 1630 - Nutrition Through the Lifecycle
- DIT 1635 - Community Nutrition
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2240 - Motivational Interviewing, Nutrition Counseling \&

Communication

- DIT 2305 - Food, Culture \& Cuisine
- DIT 2310 - Lab for Food, Culture \& Cuisine
- DIT 2505 - Food Science \& Production Lab I
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2625 - Medical Nutrition Therapy I
- DIT 2630 - Medical Nutrition Therapy Clinical I
- DIT 2735 - Foodservice Retail Business Management \& MidProgram Assessment
- DIT 2740 - Retail Business Management Directed Practicum
- DIT 2845 - Medical Nutrition Therapy II
- DIT 2850 - Medical Nutrition Therapy Clinical II
- DIT 2855 - Nutrition \& Dietetics Program Assessment Capstone
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics
- PSY 1100-General Psychology


## Occupational Therapy Assistant, AAS

## Program Code: OTA.S.AAS • Credit Hours: 65

## Description

Occupational therapy assistants (OTAs), under the supervision of occupational therapists, provide services to individuals whose abilities to cope with daily tasks are threatened or impaired by developmental deficits, aging, injury or illness. OTAs help people prevent, lessen, or overcome physical, cognitive and/or psychosocial dysfunction so that they are able to function with maximum independence. The program includes extensive clinical training that must be finished within 12 months of completion of the academic course work. A grade of "C" or higher $(77 \%)$ is required in all program courses to remain in the program.

The Occupational Therapy Assistant program is designed to be completed in five (5) semesters on a full-time basis, when the student begins the technical portion of the program. This degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses (OTA specific courses). To qualify for entry to limited enrollment courses, please see the OTA Program Specific Applicant Information Packet (PDF) located on the webpage (http://www.sinclair.edu/program/params/programCode/OTA-SAAS/).

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at ACOTE c/o AOTA, 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. AOTA's telephone number is (301)6522682. www.acoteonline.org/ The program received a 10 -year reaccreditation term in 2021-2022. It is scheduled to be reaccredited in 2031-2032.

## Career Opportunities

Occupational therapy is a health care field in which the demand for personnel continues to increase. There are not enough qualified personnel to fill the demand. According to the Bureau of Labor Statistics (bls.gov) the Job Outlook is $40 \%$ (much faster than average job growth 2014-2024). Occupational therapy assistants work in hospitals, clinics, schools, nursing facilities, group homes, home health agencies and rehabilitation centers.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- OTA 1111 - Introduction to Occupational Therapy Assistant AND
- Completion of Test of Essential Academic Skills (TEAS) Exam AND
- Minimum cumulative GPA of 2.5


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes OR
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OTA 1111 - Introduction to Occupational Therapy Assistant
- OTA 1211 - Occupational Therapy Assistant Foundations I
- OTA 1212 - Functional Anatomy
- OTA 1213 - Occupational Therapy \& Adults with Physical Dysfunction
- OTA 1214 - Occupational Therapy \& Adults with Physical Dysfunction Lab
- OTA 1311 - Occupational Therapy Assistant Foundations II
- OTA 1312 - Occupational Therapy \& Human Development
- OTA 1313 - Occupational Therapy \& Adults with Neurological Dysfunction
- OTA 1314 - Occupational Therapy \& Neurological Dysfunction Lab
- OTA 1315 - Therapeutic Use of Self
- OTA 2412 - Occupational Therapy Assistant \& Pediatrics
- OTA 2413 - Occupational Therapy Assistant \& Pediatrics Lab
- OTA 2414 - Occupational Therapy Assistant \& Psychosocial Dysfunction
- OTA 2415 - Occupational Therapy Assistant \& Psychosocial Dysfunction Lab
- OTA 2416 - Occupational Therapy Assistant Level 1 Fieldwork
- OTA 2511 - Occupational Therapy Assistant Level 2 Fieldwork A
- OTA 2512 - Occupational Therapy Assistant Level 2 Fieldwork B
- OTA 2523 - Occupational Therapy Assistant Clinical Issues A
- OTA 2524 - Occupational Therapy Assistant Clinical Issues B
- PSY 1100-General Psychology
- SOC 2215 - Race \& Ethnicity


## Physical Therapist Assistant, AAS

## Program Code: PTA.S.AAS • Credit Hours: 65

## Description

The Physical Therapist Assistant (PTA) program prepares students to provide physical therapy services under the direction and supervision of a physical therapist. The curriculum is divided among general education and technical courses, and includes classroom, laboratory, and clinical education experiences. Upon completion of the PTA program curriculum, the student is awarded the Associate of Applied Science (AAS) degree. Graduates of the program are eligible to take the National Physical Therapy Examination for Physical Therapist Assistants (NPTE-PTA) for licensure.

The PTA program is designed to be completed in five (5) semesters on a full-time basis. The degree program consists of open enrollment courses (prerequisites and general education) and program specific technical courses with limited enrollment. The open enrollment courses may be taken prior to entry into the program technical courses. The PTA program enrolls students through two different pathways, a general admissions pathway and an Accelerated Admission for Academic Achievement (AAAA). Details on admissions eligibility and processes can be found online in the PTA Program Information Packet.

The mission of the PTA program is to provide high quality education to students seeking the opportunity to practice as a physical therapist assistant under the direction and supervision of a physical therapist.

## Accreditation

The Physical Therapist Assistant Program at Sinclair Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program/institution directly, please call 937-5125355 or email ptaprogram@sinclair.edu.

## Career Opportunities

Graduates, once licensed by the State of Ohio, work either full- or parttime under the supervision of a physical therapist in a variety of practice environments, such as outpatient clinics, rehabilitation units in hospitals or nursing homes, assisted living, home health or schoolbased programs.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR

OT36 Mathematics Elective AND

- PHY 1106 - Physics for Technology AND
- PHY 1107 - Lab for Physics for Technology AND
- PTA 1000 - Introduction to Physical Therapy AND
- The student must be at least 18 years of age by initiation of PTA technical courses AND
- The student must meet minimum requirements as identified in the PTA Program Information Packet.


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes OR
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1106 - Physics for Technology
- PHY 1107 - Lab for Physics for Technology
- PSY 1100 - General Psychology
- PTA 1000 - Introduction to Physical Therapy
- PTA 1100 - Professional Issues
- PTA 1155 - Functional Anatomy
- PTA 1165 - Manual Therapy
- PTA 1215 - Functional Mobility
- PTA 1300 - Pathophysiology for the PTA
- PTA 1325 - Neuropathophysiology
- PTA 1350 - Therapeutic Exercise
- PTA 1375 - Professional Issues II
- PTA 2305 - Neuromuscular Rehabilitation
- PTA 2315 - The Medically Complex Patient
- PTA 2330 - Seminar for Clinical Practicum I
- PTA 2335 - Clinical Practicum I
- PTA 2355 - Physical Agents
- PTA 2365 - Orthopedics
- PTA 2430 - Seminar for Clinical Practicum II
- PTA 2435 - Clinical Practicum II


## Physics, AS

## Program Code: PHYE.S.AS • Credit Hours: 62-64

## Description

The Associate of Science in Physics is designed for students who are planning to transfer to a four-year college or university and pursue a baccalaureate degree program in Physics. The curriculum fulfills the freshman and sophomore general education requirements along with
the required first year physics courses offered at most four-year colleges and universities. Physics majors will develop a solid understanding of the fundamental laws of physics in addition to acquiring strong analytical and laboratory skills. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Physics can be the pathway to a variety of careers such as research scientists, astrophysicists, material scientists, radar project managers, gravity researchers, and many types of engineers.

## Program Requirements

- CHE 1211 - General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1251 - Lab for General Chemistry I
- CHE 1261 - Lab for General Chemistry II
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2320 - Linear Algebra OR
- MAT 2330 - Differential Equations \& Linear Algebra OR
- PHY 2210 - MATLAB for Scientists \& Engineers
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two
disciplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 2201 - General Physics I
- PHY 2202 - General Physics II
- PHY 2203 - Introduction to Modern Physics
- PHY 2207 - Lab for General Physics I
- PHY 2208 - Lab for General Physics II
- PHY 2780 - Scientific Thought \& Method


## Political Science, AA

## Program Code: PLSE.S.AA • Credit Hours: 61

## Description

An Associate of Arts in Political Science degree exposes students to the political thought, processes, and behavior of governments, institutions, and organizations. The study of political science provides one with the concepts, theories and methods necessary to analyze problems scientifically. These tools serve as an underpinning for a level of civic engagement constructed around critical thinking and cultural literacy, and can be applied in a wide range of careers including government, law, business, international organizations, nonprofits, journalism, and teaching. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- PLS 1120 - American Federal Government
- PLS 1232 - State \& Local Government
- PLS 2200 - Political Life, Systems \& Issues
- PLS 2220 - International Relations
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Associate of Arts Elective $\mathbf{1 2} \mathbf{~ C r} . \mathbf{H r}(\mathbf{s})$.


## Psychology, AA

## Program Code: PSYE.S.AA • Credit Hours: 60

## Description

The Associate of Arts in Psychology prepares students for entry-level positions in fields such as education, mental health, and community service. The curriculum includes courses in social psychology, abnormal psychology, human development, and personality psychology, as well as current psychological theory and practice. This degree prepares students to directly enter the workforce and it transfers well to most 4-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Graduates are employed as psychiatric and mental health technicians, case workers or managers, victim advocates, residential/ group home specialists, and in a variety of other positions in which knowledge of human behavior and mental processes is beneficial, including sales and marketing, human resources, community service agencies, administrative positions, and others.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.
$\mathrm{Hr}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (May not be PSY course) $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PSY 2220 - Personality Psychology
- PSY 2225 - Social Psychology
- Psychology Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1160 - Black Psychology OR
- PSY 2180 - Psychology of Gender
- SCC 1101 - First Year Experience
- Associate of Arts Elective $\mathbf{8 C r} \mathbf{~ H r}(\mathbf{s})$.

Psychology Electives

- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2214 - Drugs \& Behavior
- PSY 2218 - Principles of Counseling
- PSY 2228 - Industrial Organizational Psychology
- PSY 2235 - Behavioral Science Research Methods
- PSY 2236 - Behavioral Science Statistics
- PSY 2242 - Educational Psychology
- PSY 2250 - Behavior Modification
- PSY 2270 - Psychology Service Learning


## Public Health, AAS

## Program Code: PH.S.AAS • Credit Hours: 66-64

## Description

The associate of applied science degree in Public Health provides students with the introductory foundations for a future career in public health. Graduates of the program will be equipped with the population health skills to address the world's most pressing health issues. The program is also designed to promote transferability to the bachelor's degree completion programs in the health field.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether the student may enroll.

## Career Opportunities

Career opportunities include: Health Educator; Health Promotion Program Coordinator; Public Health Study Coordinator; Injury Prevention Specialist; Healthcare Navigator; Community Health Worker; Community Activist; Disease Prevention Activist; Homeless Services Educator; Consumer Advocate.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1105 - Overview of Holistic Health
- ALH 1107 - Core Concepts of Public Health
- ALH 1127 - Public Health Program Planning \& Intervention
- ALH 1140 - Fundamentals of Disease Processes
- ALH 1250 - Health Science Practicum
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- MAS 1102 - Clinical Medical Assisting I OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe OR
- ALH 1120 - Nurse Aide Training
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 1214 - Personal \& Community Health Behavior
- ENS 2420 - Concepts of Lifestyle Coaching
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} \mathbf{~ H r}(\mathbf{s})$.
- MHT 1101 - Introduction to Mental Health Services
- MHT 1202 - Motivational Interviewing
- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- PSY 2126 - Stress Management
- PSY 2200 - Lifespan Human Development
- SOC 1101 - Introduction to Sociology


## Radiologic Technology, AAS

## Program Code: RAT.S.AAS • Credit Hours: 62

## Description

As a specialized discipline within the radiologic science profession, radiographers perform medical imaging procedures to aid the physician in the diagnosis and treatment of injury and disease. Graduates will be eligible to apply for the national credentialing examination offered by the American Registry of Radiologic Technologists (ARRT).
Successful completion of the ARRT credentialing examination simultaneously satisfies the Ohio Department of Health (ODH) Radiologic Licensure Program requirements.

The Radiologic Technology program is designed to be completed in five (5) semesters on a full-time basis when the student begins the technical portion of the program. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. Completion of prerequisites and a cumulative GPA of 2.8 is required, as well as a grade of " C " or higher is required in all program courses.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), located
at 20 N. Wacker Drive, Suite 2850, Chicago, IL. 60606-3182. 312-7045300 mail@jrcert.org or www.jrcert.org

## Career Opportunities

A career in Radiologic Technology can lead in many directions. Graduates may find employment in comprehensive hospitals, suburban or rural outpatient centers or physician offices. Completion of this associate degree program can also lead to additional educational opportunities such as higher degree programs in management, education, etc. and advanced imaging programs designed to prepare radiographers for specialization in imaging modalities such as Computed Tomography (CT), Magnetic Resonance Imaging (MRI), etc.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1107 - Human Biology AND
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology AND
- MAT 1470 - College Algebra AND
- RAT 1101 - Introduction to Radiologic Technology
- AND Approval of Department


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1470 - College Algebra
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- RAT 1101 - Introduction to Radiologic Technology
- RAT 1111 - Clinical Practicum I
- RAT 1121 - Radiographic Procedures I
- RAT 1131 - Patient Care in Radiologic Technology
- RAT 1212 - Clinical Practicum II
- RAT 1222 - Radiographic Procedures II
- RAT 1241 - Radiologic Sciences I
- RAT 2413 - Clinical Practicum III
- RAT 2415 - Radiographic Pathology
- RAT 2423 - Radiographic Procedures III
- RAT 2429 - Lab for Radiographic Procedures III
- RAT 2442 - Radiologic Sciences II
- RAT 2514 - Clinical Practicum IV
- RAT 2526 - Capstone in Radiologic Technology
- RAT 2543 - Radiologic Sciences III


## Real Estate, AAS

## Program Code: RES.S.AAS • Credit Hours: 61-62

## Description

In the Real Estate degree program, students acquire a variety of skills in selling, marketing, leasing, buying, appraising, investing in and managing real property. Courses are offered which are required by the Ohio Division of Real Estate for persons taking the real estate sales examination.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities include but are not limited to careers in property management, investing, appraising, abstracting, and real estate sales.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- FIN 2450 - Personal Finance
- LAW 1101 - Business Law
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PLS 1232 - State \& Local Government
- RES Real Estate Elective 5-6 Cr. $\mathbf{H r}(\mathbf{s})$.
- RES 1101 - Real Estate Principles
- RES 1102 - Real Estate Abstracting
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal
- RES 1302 - Real Estate Investment: Analysis \& Financing
- RES 1402 - Property Management
- RES 2170 - Real Estate Internship
- SOC 1101 - Introduction to Sociology


## Real Estate Electives

- ACC 1220 - Introduction to Managerial Accounting
- CAT 1161 - Introduction to the Built Environment
- ENT 2140 - Small Business Finance
- MAN 2140 - Human Resource Management
- MRK 2135 - Digital Marketing
- MRK 2225 - Sales Fundamentals


## Respiratory Care, AAS

## Program Code: RET.S.AAS • Credit Hours: 65

## Description

Respiratory care practitioners are responsible for the prevention, treatment, management and rehabilitation of patients of all ages with deficiencies or abnormalities associated with the cardiopulmonary system. The Respiratory Care program is designed to be completed in five (5) semesters (excluding prerequisites), on a full-time basis. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A cumulative GPA of 2.5 is required and an overall grade point average of at least 2.0 is necessary for continuance in the program and graduation.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The program is fully accredited by the Commission on Accreditation for Respiratory Care (CoARC), www.coarc.com. For further information regarding the Sinclair College respiratory care program outcomes data, please visit the CoARC website. Upon completion of the program the graduate is eligible for the national credentialing examinations provided by the National Board for Respiratory Care (NBRC). Graduates will also be eligible for a license to practice in the State of Ohio via the State Medical Board of Ohio. In addition, graduates meet the requirements for licensure in other states.

## Career Opportunities

Respiratory Care is a growing profession with opportunities for graduates to work with newborn, children, adult and geriatric patients in hospitals/acute care setting, long-term facilities, home care/durable medical equipment companies and physician offices.

## Program Prerequisite(s)

- BIO 1107 - Human Biology AND
- CHE 1111 - Introduction to Chemistry I AND
- HIM 1101 - Medical Terminology AND
- RET 1100 - Introduction to Respiratory Care AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective
- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- CHE 1111 - Introduction to Chemistry I
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- RET 1100 - Introduction to Respiratory Care
- RET 1101 - Respiratory Care Fundamentals I
- RET 1102 - Lab for Respiratory Care Fundamentals I
- RET 1124 - Cardiopulmonary Pharmacology I
- RET 1125 - Respiratory Care Sciences
- RET 1201 - Respiratory Care Fundamentals II
- RET 1202 - Lab for Respiratory Care Fundamentals II
- RET 1203 - Respiratory Care Clinic I
- RET 1205 - Cardiopulmonary Disease Processes
- RET 1301 - Respiratory Care Fundamentals III
- RET 1303 - Respiratory Care Clinic II
- RET 2101 - Critical Care I
- RET 2102 - Lab for Critical Care I
- RET 2103 - Respiratory Care Clinic III
- RET 2124 - Cardiopulmonary Pharmacology II
- RET 2201 - Critical Care II
- RET 2202 - Lab for Critical Care II
- RET 2203 - Respiratory Care Clinic IV
- RET 2204 - Respiratory Care Clinic V
- RET 2220 - Respiratory Care Emergency Preparedness
- RET 2222 - Lab for Respiratory Care Emergency Preparedness
- RET 2250 - Pediatrics \& Neonatology


## Social Work, AA

## Program Code: SWKE.S.AA • Credit Hours: 60-62

## Description

Social Work is a profession for people who want to help those in need to overcome difficulties and improve their lives. The Associate of Arts in Social Work is dedicated to students wishing to transfer to a four year university in Social Work or a related field. With an associate's, students can begin working in the field as paraprofessionals in social service settings. Social Work will provide students with skills and knowledge necessary to help people with a wide range of issues including psychological/mental health, behavioral, financial, health, relationships, and substance abuse problems. At the Associate's level, students complete practicum and service learning opportunities and explore skills related to advocacy and case management as well as skills related to working with multicultural client populations. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Social Work is a helping profession which aims to assist individuals, families, and larger groups; as well as targeting the social problems which effect society today. The Department of Labor Statistics shows the job outlook for Social Work is projecting growth in the field of $19 \%$ between 2012 and 2022 which is faster than the average growth for other occupations. There is an increased demand for social work in fields such as aging and healthcare. Social Work allows opportunities for licensure and higher education which lead to more open doors for employment in the field. Social Workers are found in almost every facet of society including in the medical field such as hospitals and nursing homes, child welfare, schools, jails, and private practice.

## Program Requirements

- BIO 1111 - General Biology I
- BIO 1211 - General Biology II OR
- OT36 Natural and Physical Science Elective
- COM 2206 - Interpersonal Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts and Humanities Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathrm{Hr}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary OR

- OT36 Social and Behavioral Sciences Elective
- PLS 1120 - American Federal Government OR
- PLS 2200 - Political Life, Systems \& Issues
- PSY 1100 - General Psychology
- SCC 1101 - First Year Experience
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work
- Modern Language Electives 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.


## Sociology, AA

## Program Code: SOCE.S.AA • Credit Hours: 60

## Description

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. The Associates of Arts in Sociology can lead to successful transfer to a four-year college or university baccalaureate program. Sociology provides 21st century skills for all students regardless of the major: The ability to critically analyze social problems/issues necessary for responsible decision making; a systematic approach to information gathering and interpretations of data; a fundamental comprehension of multi-cultural differences and global diversity. With an associate's, students can begin
working in the field as paraprofessionals in social service \& business settings. The curriculum fulfills the freshman and sophomore general education requirements for most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $8 \mathbf{C r}$. Hr(s).
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100-General Psychology
- SCC 1101 - First Year Experience
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 1160 - Sociology of Aging
- SOC 2205 - Social Problems
- SOC 2215 - Race \& Ethnicity
- Associate of Arts Elective $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.


## Sport and Recreation Education, AA

## Program Code: PED.S.AA • Credit Hours: 65

## Description

This program is designed for sport and recreation careers and will fulfill the freshman and sophomore educational requirements at most four-year colleges or universities. Sport and Recreation provides two years of a solid foundation in sport related business. It also contains a Coaching short-term certificate. Course work includes management, marketing, coaching, and leadership along with many other respective components of the industry. Students are prepared to enter the profession or transfer for completion of a baccalaureate degree. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Sport and Recreation Education gives the student a variety of options. The student could work in sports information, promotions, ticket sales, media relations, event management, tournament planning and marketing and facility management. Some careers will require a baccalaureate degree.

## Program Requirements

- ALH 1132 - Heartsaver First Aid, CPR \& AED
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 2419 - Health Promotion, Fitness \& Sport Programming
- ENT 2140 - Small Business Finance
- GLG 1101 - Physical Geology
- GLG 1201 - Historical Geology
- HIS 1111 - Western Civilization I
- HIS 1112 - Western Civilization II
- MAN 1107 - Foundations of Business
- MAN 1114 - Introduction to Sports Management
- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership
- MAN 2270 - Management Internship
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.
$\mathrm{Hr}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r . ~ H r ( s ) . ~}$
- OT36 Social \& Behavioral Sciences Elective (may not be PSY course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MRK 2220 - Small Business Marketing
- PSY 1100 - General Psychology


## Surgical Technology, AAS

## Program Code: SUT.S.AAS • Credit Hours: 60

## Description

The Surgical Technology program at Sinclair Community College has been CAAHEP approved since 1998 and offers the opportunity to prepare for a career as a member of a surgical team.

A surgical technologist works together with the surgeon, registered nurse, and anesthesiologist as a member of the surgical team. To ensure proper surgical case management, the surgical technologist prepares and passes all sterile instruments during the surgical procedure while maintaining the sterile field and anticipating the needs of the surgeon.

The surgical technologist helps to meet the needs of patients in the operating rooms of hospitals, ambulatory surgery centers, physician offices, diagnostic facilities and other agencies where surgery is performed.

The Surgical Technology program is designed to be completed in five (5) semesters on a full-time basis. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. A cumulative GPA of 2.5 is required, as well as a grade of " C " or higher in all program courses.

The program includes both didactic instruction and supervised clinical practice in all areas required by the ARC/STSA (in collaboration with CAAHEP). Supervised clinical practice in area operating rooms include participating in procedures in general surgery, obstetrics and gynecology, ophthalmology, otorhinolaryngology, plastic surgery, urology, orthopedics, neurosurgery, thoracic surgery, cardiovascular, and peripheral vascular surgery.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Accredited by CAAHEP (Commission on Accreditation of Allied Health Education Programs), Sinclair's Surgical Technology program provides students with the opportunity to work as a Certified Surgical Technologists. In this program, students will be required to complete the academic classroom requirements, but will also have the opportunity to gain valuable supervised clinical practice. As part of the curriculum, the students will rotate through the clinical affiliates as scheduled in the course sequence. The standard surgical rotation case requirements that students must achieve is 120 cases, following the Core Curriculum for Surgical Technology, 6e (CCST6e). Students are required to complete a minimum of thirty (30) cases in General Surgery, twenty (20) of which should be in the First Scrub Role. In addition, students are required to complete a minimum of ninety (90) cases in various surgical specialties. Sixty (60) of those cases should be in the first scrub role and evenly, but not necessarily equally distributed between a minimum of four (4) surgical specialties.

## Career Opportunities

A Surgical Technologist helps to meet the surgical needs of patients in the operating rooms in a variety of different environments. Employment may be found in hospital operating rooms, same day surgery centers, labor and delivery units, endoscopy units, and many other settings where invasive therapeutic or diagnostic surgical procedures are performed. Surgical Technologists may also be employed privately by a surgeon or by surgeon group practices that have specialized teams.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- HIM 1101 - Medical Terminology AND
- MAT 1130 - Mathematics in Health Sciences AND
- Restricted to Majors


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2201 - Survey of Drug Therapy
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIO 2205 - Microbiology
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences
- PSY 1100-General Psychology
- SUT 1110 - Theory \& Fundamentals
- SUT 1117 - Laboratory for Theory \& Fundamentals
- SUT 1120 - The Surgical Process
- SUT 1127 - Lab for the Surgical Process
- SUT 2110 - Surgical Procedures I
- SUT 2117 - Directed Practice for Surgical Procedures I
- SUT 2120 - Surgical Procedures II
- SUT 2127 - Directed Practice for Surgical Procedures II
- SUT 2200 - Surgical Procedures III
- SUT 2207 - Directed Practice for Surgical Procedures III
- SUT 2300 - Surgical Technology Review


## Theatre Performance, AA

## Program Code: THEP.S.AA • Credit Hours: 61

## Description

The theatre performance degree is designed as a university-parallel program for students to transfer to four-year institutions. The faculty and staff are theatre professionals with extensive experience in acting, directing, playwriting and choreography. Curriculum is based on skills required to enhance students' performance including: voice, movement, character and script analysis, dance, auditioning and presentation. Successful students achieve real-world experience participating in our theatre productions in several performance venues. Students must pass all THE courses with a grade of C or better. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Accreditation

Sinclair's Theatre Performance Program is accredited by the National Association of Schools of Theatre (NAST).

## Career Opportunities

Employment opportunities are available in areas such as performer, director, educator, dramaturge, playwright, arts administrator, company business or artistic manager. These positions can commonly be found in theatre, film, television commercials, voice over work, theme parks, cruise ships, education, and modeling. A theatre performance degree also provides skills to enrich any career that requires artistic research, presentations, customer service, confidence or communication.

## Program Prerequisite(s):

## Approval of Department

## Program Requirements

- COM 2211 - Effective Public Speaking
- DAN 1172 - Ballet OR
- DAN 1173 - Modern Dance OR
- DAN 1174 - Jazz Dance I OR
- DAN 1175 - Tap Dance
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be THE course) 3 Cr.

Hr(s).

- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two
disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- THE 1105 - Introduction to Theatre
- THE 1106 - Stagecraft
- THE 1107 - Lab for Stagecraft
- THE 1111 - Acting I
- THE 1212 - Voice For The Actor
- THE 1194 - Applied Theatre Technology I
- THE 1194 - Applied Theatre Technology I
- THE 1196 - Applied Theatre Technology II
- THE 1199 - Applied Theatre Performance
- THE 2115 - Movement For The Actor
- THE 2201 - History of Theatre I
- THE 2202 - History of Theatre II
- THE 2206 - Script Analysis
- THE 2216 - Acting II


## Theatre Technology, AA

## Program Code: THET.S.AA • Credit Hours: 62

## Description

The theatre technology degree is a university-parallel program designed for transfer to four-year institutions. Faculty and staff are theatre professionals with extensive experience in design and technology: scenic, lighting, costumes, props, sound, directing and stage management. Curriculum is based on skills to enhance students' technical skills in stage craft, lighting and costume fundamentals, and stage management. Successful students achieve real-world experience with theatre productions in several performance venues. Students must pass all THE courses with a grade of C or better. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Employment opportunities are available in areas such as designer, technician, director, educator, stage manager, arts administrator and company business or artistic manager. These positions can commonly be found in theatre, film, theme parks, cruise ships, rock shows, museums, churches, or fashion. A theatre technology degree also provides the skills to enrich any career that requires artistic research, safety troubleshooting, management, and creative problem solving.

## Accreditation

Sinclair's Theatre Technology Program is accredited by the National Association of Schools of Theatre (NAST).

## Program Prerequisite(s):

## Approval of Department

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be THE course) 3 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two
disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- THE 1105 - Introduction to Theatre
- THE 1106 - Stagecraft
- THE 1107 - Lab for Stagecraft
- THE 1103 - Principles of Acting OR
- THE 1111 - Acting I
- THE 1116 - Stage Lighting Fundamentals
- THE 1117 - Lab for Stage Lighting Fundamentals
- THE 1118 - Costume Fundamentals
- THE 1119 - Lab for Costume Fundamentals
- THE 1194 - Applied Theatre Technology I
- THE 1194 - Applied Theatre Technology I
- THE 1196 - Applied Theatre Technology II
- THE 1196 - Applied Theatre Technology II
- THE 2201 - History of Theatre I
- THE 2202 - History of Theatre II
- THE 2206 - Script Analysis
- THE 2220 - Theatre Portfolio
- THE 2240 - Stage Management
- THE 2296 - Applied Theatre Technology IV


## Unmanned Aerial Systems, AAS

## Program Code: UAS.S.AAS • Credit Hours: 60-64

## Description

The Unmanned Aerial Systems (UAS) degree program prepares students for entry level positions in the UAS industry by providing foundational knowledge and skills in UAS mission planning, applications, maintenance, laws and regulations, and data analytics, and project management using UAS platforms. Program content includes an introduction to UAS flight, history, avionics, sensors, communications systems and selectable paths including Data Analysis and applications such as First Responders, Geographic Information Systems, Precision Agriculture, and Entrepreneurship. Students will prepare for and conduct unmanned flights similar to those commonly performed in the industry observing Federal Aviation Administrations (FAA) regulations that govern UAS operations.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

The Sinclair Unmanned Aerial Systems Associate of Applied Science degree will produce graduates who will serve the immediate Dayton area, broader region, and nationally. Graduates of the associate degree program from Sinclair Community College will contribute to filling the current and growing need within the state of Ohio and nation for unmanned aerial systems related applications such as Geographic Information, Data Analytics, First Responders and Precision Agriculture.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1246 - Air Traffic Control Communications
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- AVT 2240 - Human Factors in Aviation
- AVT 2279 - Unmanned Aerial Systems Project
- AVT 2280 - Introduction to UAS Maintenance
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EET 2221 - UAS Sensors \& Systems
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering

Technology

- PHY 1141 - College Physics I
- Data Analytics Pathway OR
- First Responders Pathway OR
- Geographic Information Pathway OR
- Precision Agriculture Pathway OR
- Entrepreneurship Pathway 9-11 Cr. $\mathbf{H r}(\mathbf{s})$.
- AVT 2700 - Aviation Internship OR
- AVT UAS Elective 1-2 Cr. $\mathbf{H r}(\mathbf{s})$.

Data Analytics Pathway

- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis
- AVT 1123 - Acoustic \& CBRNE Data Analysis
- GEO 1107 - Introduction to Geographic Information Systems (GIS)

Entrepreneurship Pathway

- AVT 1115 - Introduction to UAS Entrepreneurship
- AVT 2115 - UAS Entrepreneurship Capstone
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business

First Responders Pathway

- AVT 1108 - UAS First Responder Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1155 - Homeland Security Issues \& Administration
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory

Geographic Information Pathway

- AVT 1114 - Geospatial Information for UAS
- CAT 1501 - Fundamentals of Surveying \& Mapping
- GEO 1107 - Introduction to Geographic Information Systems (GIS)

Precision Agriculture Pathway

- AVT 1112 - UAS Precision Agriculture
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200 - Agricultural Economics AND
- AGR 1300 - Agronomy


## Veterinary Technology, AAS

## Program Code: VET.S.AAS • Credit Hours: 65

## Description

The Veterinary Technology Program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. Most open enrollment courses must be taken prior to entry into the limited enrollment courses. To be considered for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A graduate from this program will be eligible to sit for the Veterinary Technician National Exam (VTNE.) Those graduates who pass this exam with a score of $75 \%$ or better will be eligible to register with the Ohio Veterinary Medical Licensing Board in order to practice within the State of Ohio.

NOTE: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Sinclair College Veterinary Technology Program is fully accredited by the American Veterinary Medical Association Committee on Veterinary Technician Education and Activities (AVMA CVTEA), effective March 28, 2019.

## Career Opportunities

The Associate of Applied Science degree in Veterinary Technology is designed to train Veterinary Technicians to assist Veterinarians in animal hospitals, laboratory research centers, referral centers, zoos, etc.

A registered veterinary technician (RVT) is responsible for assisting the veterinarian in a general practice and performing essential animal care tasks. His or her job duties may include, but are not limited to: performing dental cleanings and radiologic procedures; surgical and anesthetic assistance; diagnostic laboratory techniques; IV catheter placement; patient monitoring; inventory control; and office staff management. In addition, this degree can be a stepping-stone to a 4year degree at another institution, and eventually to Veterinary School (an additional 4-year program). This program provides training in animal husbandry and restraint, nursing, surgical preparation and techniques, drug administration, anesthesia, anatomy, laboratory techniques, and radiography. Preceptorships at various private practices and research institutions provide valuable on-the-job training. The veterinarians of the Miami Valley anticipate a need of nearly 60 registered veterinary technicians for hire annually for at least the next 5 years. This program is unique in that it places students within veterinary hospitals very early in the course of study, allowing students and hospitals alike to determine what the "best fit" will be for them within the hospital environment. Nearly all students are offered one or more jobs prior to the completion of the program.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II AND
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I AND
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences AND
- VET 1102 - Introduction to Veterinary Technology I AND
- VET 1202 - Introduction to Veterinary Technology II AND
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism AND
- Approval of Department


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1103-Test Taking Strategies
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology
- BIO 2206 - Lab for Microbiology
- CHE 1111 - Introduction to Chemistry I
- CHE 1151 - Lab for Introduction to Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- VET 1102 - Introduction to Veterinary Technology I
- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2005 - Clinical Practice II: Medical Terminology \& Ethics
- VET 2106 - Comparative Anatomy \& Physiology
- VET 2104 - Animal Husbandry \& Disease
- VET 2107 - Technical Practicum I OR
- VET 2108 - Veterinary Assistant Technical Practicum
- VET 2110 - Veterinary Parasitology
- VET 2111 - Large Animal Husbandry \& Veterinary Techniques
- VET 2113 - Laboratory for Comparative Anatomy \& Physiology
- VET 2115 - Veterinary Anesthesia \& Surgical Skills
- VET 2117 - Laboratory for Veterinary Anesthesia \& Surgical Skills
- VET 2205 - Veterinary Dentistry, Advanced Radiology \&

Diagnostic Laboratory

- VET 2207 - Technical Practicum II
- VET 2211 - Veterinary Case Studies
- VET 2250 - Veterinary Pharmacology
- VET 2300 - Preceptorship


## Visual Communications, AAS

## Program Code: VIS.S.AAS•Credit Hours: 64-65

## Description

The program prepares students for careers in visual communication which is creative, fast paced and in demand by most businesses. Students will develop the knowledge and technical skills necessary to create both printed and digital design work. This includes the design of stationery, brochures, magazines, advertising, packaging, signage, web pages, interactive media and other pieces. Creativity, problem solving and the design process are stressed. Advanced computer skills, portfolio development and job-seeking strategies are also incorporated into the curriculum.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

Visual Communications graduates typically pursue careers as graphic designers (print) or digital designers (interactive/web) in design studios, advertising agencies, web firms, magazine and book publishing companies, printing companies or corporate design departments. Some graduates choose to continue their education in design or a related field at a four-year institution.

Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 1161 - Black \& White Darkroom Photography I OR
- ART 2265 - Digital Color Photography I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} \mathbf{~ H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1150 - Design Processes II
- VIS 1180 - History \& Theory of Graphic Design
- VIS 1210 - Design Drawing
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production
- VIS 2110 - Design Principles
- VIS 2120 - Design Applications I
- VIS 2160 - Design Applications II
- VIS 2260 - Design Portfolio
- Visual Communications Elective 3-4 Cr. $\mathbf{H r}(\mathbf{s})$.

Visual Communications Electives

- ART 1101-2-D Foundations
- ART 1102 -3-D Foundations
- ART 1111 - Drawing I
- ART 1141 - Introduction to Ceramics
- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- CIS 1350 - Web Site Development with HTML \& CSS
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1240 - Color Theory
- IND 2135 - Rendering
- MAN 1107 - Foundations of Business
- MRK 2100 - Foundations of Marketing
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2220 - Small Business Marketing
- MRK 2225 - Sales Fundamentals
- VIS 1320 - User Experience/User Interface
- VIS 1420 - Video Production
- VIS 2270 - Design Internship


## Four-Year Degree Programs

## Aviation Technology/Professional Pilot, BAS

## Program Code: AVTP.S.BAS Credit Hours 123-126

## Description

The Bachelor of Applied Science (BAS) degree in Aviation Technology/Professional Pilot is designed to enhance the technical skills of students who have earned an associate degree in Aviation Technology/Professional Pilot at Sinclair Community College, or who wish to pursue a complete bachelors degree. Students may choose fixed wing (single engine and multi-engine) or helicopter pilot certifications. The curriculum in the Professional Pilot program is rigorous and is designed for full time students to complete in 8 semesters. Students must maintain a minimum of a 2.5 GPA . Enrollment in the flight lab courses is limited and priority will be given to full time, degree seeking students. Part time students will be admitted on a space available basis. The student must obtain a Federal Aviation Administration (FAA) 2nd class medical certificate prior to enrolling in any of the flight labs. In addition to standard tuition fees there are additional course and lab fees for each of the flight labs in the program. The flight lab fees are structured to cover the costs associated with the minimum flying hours required for each FAA certificate. Any additional flying time costs beyond the FAA minimums covered by the flight lab fee must be borne by the student. See the Department for the latest course and flight lab fee costs.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu..

## Career Opportunities

Career opportunities are available in airline, corporate and general aviation. Projected overall employment growth of airline and commercial pilots from 2014 to 2024 is $5 \%$ with $10 \%$ projected employment growth of commercial pilots from 2014 to 2024, faster than the average for all occupations. Expected job growth of 2,337 jobs in Nonscheduled Air Transportation within this sector (20122022). Five of the 25 most concentrated occupations in Aerospace require a bachelor's degree at entry.

## Program Requirements

- AVT 1105 - Orientation to Aviation
- AVT 1110 - Private Pilot Ground School AND
- AVT 1124 - Private Pilot Flight Lab - Airplane Single Engine AND
- AVT 1170 - Instrument Pilot Ground School AND
- AVT 1224 - Instrument Pilot Flight Lab - Airplane Single Engine AND
- AVT 2250 - Commercial Pilot Ground AND
- AVT 2263 - Commercial Pilot Flight Lab - Airplane Single Engine AND
- AVT 2269 - Flight Instructor Flight Lab - Airplane Single Engine OR
- AVT 1111 - Helicopter Private Pilot Ground AND
- AVT 1126 - Private Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 1171 - Helicopter Instrument Pilot Ground AND
- AVT 1226 - Instrument Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2251 - Helicopter Commercial Pilot Ground AND
- AVT 2265 - Commercial Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2271 - Flight Instructor Flight Lab - Rotorcraft Helicopter
- AVT 1119 - Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1245 - Aviation Law
- AVT 1254 - Flight Simulator Instruction
- AVT 2125 - Developments in Aviation I
- AVT 2146 - Introduction to Airline Operations
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2211 - Advanced Navigation Science
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2247 - Aerodynamics \& Flight Mechanics I
- AVT 2258 - Flight Instructor Ground
- AVT 2266 - Multi Engine Flight Lab AND
- AVT 2275 - Instrument Flight Instructor Ground AND
- AVT 2277 - Instrument Flight Instructor Flight Lab - Airplane Single Engine OR
- AVT 2275 - Instrument Flight Instructor Ground AND
- AVT 2278 - Instrument Flight Instructor Flight Lab - Rotorcraft

Helicopter

- AVT 2700 - Aviation Internship
- AVT 3125 - Developments in Aviation II
- AVT 3150 - Crew Resource Management
- AVT 3241 - Aircraft Systems
- AVT 3242 - Aircraft Accident Investigation II
- AVT 3247 - Aerodynamics \& Flight Mechanics II
- AVT 3300 - Artificial Intelligence (AI) in Aviation OR
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 4146 - Advanced Airline Operations \& Training
- AVT 4154 - Advanced Flight Simulator Instruction
- AVT 4160 - System Safety in Aviation
- AVT 4170 - Airport Operations
- AVT 4290 - Aviation Senior Capstone Project
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Arts and Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Social and Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II


## Integrated Systems Technician, BAS

## Program Code: IST.S.BAS•Credit Hours: 120-121

## Description

The Bachelor of Applied Science Integrated Systems Technician program is ideally suited to address present and future needs in manufacturing and other industries. The program focuses on training individuals in technologies related to connected devices, particularly in industrial settings. Graduates will gain the technical and robotic skills needed to effectively integrate new devices into an existing technology infrastructure, and just as critically, will gain the skills to do so in a secure way (Cyber). The program is especially well-suited to those interested in pursuing careers as mechatronics engineering technologists, who use their combined computer science and engineering skills to work with smart technologies such as robots and manufacturing equipment. The Integrated Systems Technician will be able to understand and service/maintain Advanced Manufacturing, High Tech Warehousing, Smart Consumer Devices, Household Appliances, Automotive computer systems, and Medical Devices through the process of automation and data acquisition, providing cybersecurity, movement of data to the cloud, provide data analytics/visualization and eventually to support the business systems where intelligent decisions can be made.

## Career Opportunities

Careers this degree serves include consumer markets, medical devices, defense industry, industrial high tech manufacturing automation \& warehousing/logistics, and the robotics industry. Multiple regional employers have indicated that this is a growing need for them as they deploy more interconnected devices in advanced manufacturing, warehousing, and production. Per EMSI, the number of monthly postings seeking applicants with expertise in the greater Dayton area has grown steadily and rapidly, from 35 in September of 2016 to 249 in May of 2021. Cyber technician specializing in the micro-controller consumer markets of automotive, appliances, medical devices, defense industry, industrial high tech manufacturing automation \& warehousing/logistics, and the robotics industry. Graduates will be able to work in all areas having to do with the Internet-of-Things, from programming to engineering hardware installations, networking, security, troubleshooting and repair. 60 percent of these regionally posted IOT jobs require a bachelor's degree.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals OR
- CIS 1411 - Introduction to Networks
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2428 - IoT Architecture
- CIS 2545 - Cloud Infrastructure
- CIS 2640 - Network Security
- CIS 4101 - Advanced IoT
- CIS 4102 - Cloud Native \& IoT
- CIS 4178 - Integrated Systems Technician Advanced Capstone IoT Clients OR
- CIS 4170 - Integrated Support Technician Internship
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1105 - Soldering Fundamentals
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2202 - Introduction to Communications Principles
- EGR 2252 - Teach Pendant Robot Programming
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- EGR 3303 - Advanced Programmable Logic Controllers II
- EGR 4101 - Modern Communication Systems
- EGR 4120 - Advanced Microprocessors
- EGR 4150 - Modern Robotics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence
- OT36 Social \& Behavioral Sciences Elective (must be from two discplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (must be from two discplines) $6 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II


## Nursing, BSN

## Program Code: NUR.S.BSN • Credit Hours: 120-121

## Description

The Bachelor of Science in Nursing degree is designed to fill a workforce need by optimizing the practice of registered (RN) nurses who have earned an associate degree in nursing. This RN to BSN completion degree builds upon students' previous nursing education as well as experience working as a registered nurse. Coursework contributes to a robust understanding of leadership in evidence-based, culturally responsive nursing care to promote health, prevent disease, and improve health outcomes in individuals and populations. Students must have graduated from an accredited pre-licensure nursing program and hold a valid, unencumbered, U.S. RN license.

## Career Opportunities

The bachelor's degree in nursing augments the foundational nursing degree to enhance clinical practice and improve outcomes for nurses working in direct patient care as well as nurses in leadership and management roles in which the minimum degree requirement is a bachelor's degree in nursing. The deficit of nurses without a bachelor's degree in nursing in the Dayton region is over 700.

## Prerequisites

- Students must have graduated from a nationally accredited prelicensure nursing program and hold a valid, unencumbered, U.S. RN license.
- Students with a dismissed standing from Sinclair Community

College are required to complete Sinclair's readmissions policy steps and be readmitted to the college prior to applying for the BSN program. Contact Academic Advising to learn more.

## Program Accreditation Information

Effective October 19, 2023, this program is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing.

This candidacy status expires on October 19, 2025. Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000
http://www.acenursing.com/candidates/candidacy.asp
Note: Upon granting of initial accreditation by the ACEN Board of Commissioners, the effective date of initial accreditation is the date on which the nursing program was approved by the ACEN as a candidate program that concluded in the Board of Commissioners granting initial accreditation.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2202 - General Pharmacology
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 2205 - Microbiology
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I
- COM 2206 - Interpersonal Communication
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HUM 1130 - Humanity \& the Challenge of Technology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MAT 1450 - Introductory Statistics
- NSG 1200 - Introduction to Nursing
- NSG 1400 - Health \& Illness I: Foundational Concepts in Nursing
- NSG 1450 - Professional Nursing I: Introduction to the Role of the Professional Nurse
- NSG 1600 - Health \& Illness II: Health \& Wellness Concepts
- NSG 1650 - Professional Nursing II: Healthcare System Concepts
- NSG 2400 - Health \& Illness III: Health \& Wellness Concepts
- NSG 2450 - Professional Nursing III: Leadership \& Management of Care
- NSG 2600 - Concept Synthesis
- NSG 3101 - Nursing Theory
- NSG 3103 - Nursing Evidence-Based Practice
- NSG 4101 - Community Nursing
- NSG 4102 - Cultural Competency
- NSG 4110 - Nursing Leadership
- NSG 4120 - RN to BSN Capstone
- PHI 2206 - Introduction to Ethics
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- SOC 1101 - Introduction to Sociology
- SOC 2205 - Social Problems
- Nursing Elective 6 Cr. Hrs.


## Nursing Electives

- NSG 4103 - Informatics for the Professional Nurse
- NSG 4104 - Advanced Health Assessment \& Health Promotion
- NSG 4105 - Population Health
- NSG 4106 - Women's Health
- NSG 4107 - Academic Nurse Educator


## Unmanned Aerial Systems, BAS

## Program Code: UAS.S.BAS Credit Hours 120-124

## Description

This Bachelor of Applied Science (BAS) degree in Unmanned Aerial Systems (UAS) is designed to fill a growing workforce need by developing the technical skills of students and prepare them for jobs in this high demand industry. The degree provides a foundational understanding of UAS mission planning, advanced flight operations, hands-on maintenance, laws and regulations, data analytics, sensor operations and technology integration and testing in support of diverse industries. These include precision agriculture, infrastructure inspection, aerial mapping and surveying, first response, logistics, security, and other emerging applications that will continue to develop as the industry grows. Students will prepare for and conduct unmanned flights similar to those commonly performed in the industry observing Federal Aviation Administrations (FAA) regulations that govern UAS operations.

## Career Opportunities

More than 100,000 new jobs in UAS related fields are predicted nationwide by 2025. A technical baccalaureate degree in Unmanned Aerial Systems (UAS) will prepare the graduate to work in a variety of roles including UAS operations, maintenance, data analysis, sensor operations, technology integration and testing, and basic manufacturing in support of diverse industries including precision agriculture, infrastructure inspection, aerial mapping and surveying, first response, logistics, security, and other emerging applications that will continue to develop as the industry grows.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1246 - Air Traffic Control Communications
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- AVT 2240 - Human Factors in Aviation
- AVT 2279 - Unmanned Aerial Systems Project
- AVT 2280 - Introduction to UAS Maintenance
- AVT 2700 - Aviation Internship


## Choose one UAS track from:

- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis AND
- AVT 1123 - Acoustic \& CBRNE Data Analysis OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1108 - UAS First Responder Applications AND
- CJS 1101 - Introduction to Criminal Justice Science AND
- CJS 1155 - Homeland Security Issues \& Administration AND
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory OR
- AVT 1114 - Geospatial Information for UAS AND
- CAT 1501 - Fundamentals of Surveying \& Mapping AND
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1112 - UAS Precision Agriculture AND
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200 - Agricultural Economics AND
- AGR 1300 - Agronomy OR
- AVT 4215 - Autonomous Systems in Aviation AND
- CIS 2266 - Python for Data Analytics AND
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence OR
- AVT 1115 - Introduction to UAS Entrepreneurship AND
- AVT 2115 - UAS Entrepreneurship Capstone AND
- MAN 1107 - Foundations of Business AND
- LAW 1101 - Business Law
- AVT 3100 - Contemporary Technical, Legal \& Regulatory Issues in UAS
- AVT 3151 - UAS Operations II
- AVT 3152 - UAS Operations II Lab
- AVT 3200 - UAS Logistics
- AVT 3300 - Artificial Intelligence (AI) in Aviation
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 3500 - UAS Design Concepts
- AVT 4151 - Unmanned Systems Mission Planning
- AVT 4210 - Advanced UAS Maintenance
- AVT 4220 - Human Autonomy Teaming in Aviation
- AVT 4270 - UAS Internship II
- AVT 4279 - Unmanned Aerial Systems Senior Project
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EET 2221 - UAS Sensors \& Systems
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Any Group 3 Cr. Hr(s).
- OT36 Arts and Humanities Elective (from two or more disciplines) 6 Cr. $\mathrm{Hr}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective (from two or more disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II
- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging

Data Analysis AND

- AVT 1123 - Acoustic \& CBRNE Data Analysis OR
- Unmanned Aerial Systems elective


## Certificates

## Additive Design Specialist, STC

Program Code: ADS.S.STC • Credit Hours: 10

## Description

This certificate will introduce students to additive design and manufacturing using 3D modeling software and 3D printers.

## Career Opportunities

This certificate provides students with the basic skills needed to work as a technician in rapid prototyping using 3D design, 3D printing, and post processing

## Program Requirements

- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process


## Advanced Precision Machining, CRT

## Program Code: CAMAPM.S.CRT • Credit Hours: 30

## Description

This program provides any student whether working full time, raising a family, or going to college, the ability to pursue the exciting and indemand career of precision machining. Recent events have shown that these careers are essential in nature and can offer employment when
others do not. Starting from basic machining through advanced machining, close tolerance grinding, introduction into the world of CNC and Conversational programming, the production of detail parts and then their fit and assembly into a working product. This program will ready the student for a wide variety of manufacturing careers through development of the skills and traits that manufacturers are looking for. This program can be started in any semester.

## Career Opportunities

Careers are available for entry-level in a wide variety of manufacturing careers which include, but are not limited to, the precision machining and tool-and-die industries. The Work- Based Learning Internship opportunity gives students a host of opportunities beyond the classroom.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 2145 - Shop Floor Programming
- CAM 2700 - Computer Aided Manufacturing Internship
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Advanced Quality, CRT

Program Code: ADQ.S.CRT • Credit Hours: 33-35

## Description

This advanced certificate will provide the student with the Basic Quality Certificate and then advance them further in the Quality field covering Advanced Metrology and Gauging used in various fields. Quality Assurance and Quality Control principles will be introduced to include the elements of different inspection categories, material conformance, sampling techniques, traceability methods, and the relationship to PPAP/First Article submission. The last major components of this certificate are Quality Management Systems \& Auditing as it relates to industry standards such as ISO, TS, FDA, and the Medical Device industries.

## Career Opportunities

Quality is in everything we do and the need for Quality technicians and personnel is growing every day. The courses in this certificate will give the student an upper-level hands-on experience of what it takes to work with many of the requirements of today's Quality technicians and managers.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1310 - Advanced Metrology \& Gauging
- ISE 1313 - Coordinate Measurement
- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2310 - Quality Assurance
- ISE 2360 - Quality Management Systems \& Auditing
- MAT 1470 - College Algebra OR
- MAT 1570 - Analytic Geometry \& Trigonometry


## Advanced Video Production, CRT

Program Code: VIDP.S.CRT•Credit Hours: 32

## Description

This one-year certificate introduces students to video production, including lighting and cinematography, motion design, video editing, and audio production. Students will learn the design process, including use of digital photography, appropriate applications; and, video and audio equipment to create quality videos.

## Career Opportunities

There are various career paths in video production. You could work in television, advertising, or news reporting. You also could apply your skills in education, government, or business industries. Within these settings, you could hold positions in a variety of positions, such as a video editor, camera operator, audio editor, live stream operator, or motion graphics. There are also freelance videographer opportunities.

## Program Requirements

- ART 2265 - Digital Color Photography I
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design
- VIS 2130 - Motion Design


## Advanced Web Design, CRT

## Program Code: WEBDES.S.CRT • Credit Hours: 32

## Description

This one-year certificate introduces students to web coding and design, including conceptualizing, designing, developing, and maintaining websites. Students will also learn UX/UI, motion design, and working with a web content management tool. Students will learn a variety of web concepts and digital design applications.

## Career Opportunities

Web designers develop, create, and test website or interface layout, functions, and navigation for usability. Web Designers typically work for corporations across industries, but they can also work for web design agencies or as self-employed individuals. They work closely with software and marketing professionals to make sure websites are designed coded correctly. Still others work in industries including publishing, management consulting, and advertising.

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design
- VIS 2130 - Motion Design
- VIS 2170 - Web Content Management


## Aerial Sensing Data Analytics, STC

## Program Code: UASDTA.S.STC • Credit Hours: 18

## Description

The Aerial Sensing Data Analytics Short-Term Technical Certificate provides an introduction to unmanned aerial systems (UAS) technologies, applications, and regulatory and legal considerations. The program prepares students for entry level positions as analysts of aerially collected electro-optical (EO) and infrared (IR), multi-and hyperspectral (MSI/HSI), synthetic aperture radar (SAR), light detection and ranging (LiDAR), acoustic, and chemical, biological, radiological, nuclear, and explosives (CBRNE) data.

## Career Opportunities

The Aerial Sensing Data Analytics Short-Term Technical Certificate will produce graduates who will serve the immediate Dayton area, broader region, and nationally. Graduates of certificate program will contribute to filling the current and growing need for data analysts that can process, interpret, present, and make decisions based on a variety of unmanned and manned aircraft collected data types. Positions exist in start-ups and existing established firms, with growth expected for the foreseeable future. The Association for Unmanned Vehicle Systems International estimates that there will be 100,000 new jobs related to unmanned aerial systems created by 2025.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis
- AVT 1123 - Acoustic \& CBRNE Data Analysis
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)


## Agribusiness Greenhouse Management, CRT

Program Code: AGM.S.CRT • Credit Hours: 33

## Description

The Agribusiness Greenhouse Management certificate will prepare students for a successful business career in industries related to the food and agricultural system including input markets, farm production, greenhouse management, food manufacturing and distribution, and food and plant retailing. This program provides a broad-based study of the successful production of food, plants, and other agricultural products and will help students develop the skills for decision making and an understanding of the agricultural-food system dynamics. Upon completion, students will have the knowledge to enhance their contributions to agricultural enterprises or initiate their own entrepreneurial ventures.

## Career Opportunities

Job opportunities for this certificate include greenhouse manager, farm manager, grain and livestock buyer, crop producer, marketing head, quality controller, urban landscaper, inventory technician, landscape enhancement manager, landscape technician, etc.

## Program Requirements

- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1204 - Plant Propagation
- AGR 1206 - Horticulture II
- AGR 1208 - Sustainable Landscape Design
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior


## Agribusiness, STC

## Program Code: AGR.S.STC • Credit Hours: 16

## Description

The agribusiness short-term certificate will introduce students to the agriculture industry and prepare them for entry into the agriculture workforce. Graduates of this certificate will be skilled in the foundations of business, agriculture, agricultural economics and agronomy.

## Career Opportunities

Potential employment in agriculture includes entry-level positions in the following: agricultural technician, farm operations, agronomy, agricultural finance and accounting, retail sales and licensed pest control.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1200 - Agricultural Economics
- AGR 1300 - Agronomy
- BIS 1120 - Introduction to Software Applications
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business


## Agricultural Technology, CRT

## Program Code: AGR.S.CRT•Credit Hours: 31

## Description

The certificate will prepare students for employment in various areas of agriculture. Completers of this certificate will gain additional expertise in areas including agronomy, large animal science, agricultural economics, retail and customer service.

## Career Opportunities

Potential employment in agriculture includes agricultural technician, farm operations, farm retail, farm bureau representative or farm assistant.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- AGR 1300 - Agronomy OR
- AGR 1110 - Introduction to Large Animal Sciences: Handling \& Husbandry
- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r} . \operatorname{Hr}(\mathbf{s})$. OR
- OT36 Natural and Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- LAW 1101 - Business Law AND
- AGR 1200 - Agricultural Economics OR
- AGR 1111 - Principles of Large Animal Reproduction AND
- AGR 1112 - Principles of Large Animal Nutrition


## Aircraft Dispatcher, STC

## Program Code: ADSP.S.STC • Credit Hours: 24

## Description

The Aircraft Dispatcher certificate provides students with the theory and practical knowledge necessary to enter a career in the aviation industry as an aircraft dispatcher. Completion of this certificate will make the student eligible to take the knowledge and practical tests leading to the Federal Aviation Administration (FAA) Aircraft Dispatcher (ADX) certification. Students study aircraft performance, meteorology, crew resource management, air traffic control, advanced navigation, airline operations and FAA knowledge. Age Restrictions: To be eligible for an ADX certificate, a person must be at least 23 years of age. Individuals who are at least 21 years of age may take the ADX knowledge and practical tests. Individuals who pass the practical test prior to reaching 23 years of age are not entitled to the certificate itself but will be issued a Letter of Aeronautical Competency. Upon reaching 23 years of age, the FAA will issue the ADX certificate.

## Career Opportunities

Career opportunities are available in airline and corporate aviation.

## Program Requirements

- AVT 1105 - Orientation to Aviation
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1141 - Principles of Aviation Leadership
- AVT 2146 - Introduction to Airline Operations
- AVT 2157 - Aircraft Performance I
- AVT 2158 - Aircraft Performance II
- AVT 2159 - Canadair Regional Jet (CRJ) Aircraft Systems
- AVT 2166 - Practical Dispatch Applications
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2168 - Dispatcher Oral Preparation
- MET 1131 - Personal Computer Applications for Engineering Technology


## Airframe Aviation Maintenance, CRT

## Program Code: AAM.S.CRT • Credit Hours: 31

## Description

The Airframe Aviation Maintenance certificate provides the knowledge and skill required by the Federal Aviation Administration (FAA) for the airframe maintenance technician student. Students will learn to apply the knowledge and skills covering the required sections of training for the Airframe certificate as required by the Federal Aviation Administration under Part 147 Appendix C. Those subjects include assembling and rigging, metallic and non-metallic structures, fuel systems, electrical power production and distribution, instruments, communication/navigation systems, cabin atmospheric control systems, landing gear, hydraulics and pneumatics, fire protection systems, aircraft finishing, ice protection systems and welding inspections.

## Career Opportunities

Boeing Commercial Aircraft Company recently predicted 1,000,000 more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next 15-20 years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1106 - Airframe Safety Systems
- AVT 1107 - Fuel Systems
- AVT 1133 - Instruments/Communications
- AVT 1136 - Sheet Metal
- AVT 1214 - Cabin Atmospheric Control
- AVT 1218 - Utility Systems
- AVT 2121 - Assembly \& Rigging
- AVT 2132 - Airframe Electrical Systems
- AVT 2236 - Non-Metallic Structures


## Airline Flight Attendant, STC

## Program Code: AFAS.S.STC • Credit Hours: 12

## Description

The Airline Flight Attendant certificate provides students with the basic theory of airline travel with an understanding of the policies, procedures and means of compliance with Federal Aviation Regulations. Students explore the business of air commerce and develop the skills of a travel professional. Includes exploration of communications, safety and security, air travel, customer service, airline operations and crew resource management. This program develops the knowledge and skills required to serve as a flight attendant and to enter a career in the aviation industry.

## Career Opportunities

Career opportunities are available in airline and corporate aviation.

Program Requirements

- AVT 1102 - Orientation to Inflight Services
- AVT 1148 - Aircrew Emergency Management
- AVT 1151 - Crew Survival \& Rescue Techniques
- AVT 2146 - Introduction to Airline Operations


## Appalachian Studies, STC

## Program Code: HUM.S.STC • Credit Hours: 16

## Description

The short-term technical certificate is designed for students who are planning on using Appalachian Studies to enhance their careers in a variety of disciplines such as: Sociology, Social Work, Education,

Government, Health Care, and Public Safety (i.e., fire and police work). The student who pursues this short-term technical certificate will use the certificate to supplement their professional development.

## Career Opportunities

This certificate enhances careers in Sociology, Social Work, Education, Government, Health Care, Public Safety and related fields.

## Program Requirements

- HUM 1141 - Appalachian History \& Culture
- HUM 1142 - Native American History
- SOC 1101 - Introduction to Sociology OR
- SOC 1145 - Introduction to Cultural Anthropology
- REL 2255 - People \& Religion OR
- SOC 1108 - Appalachian Families OR
- SOC 2210 - Cultural Humility for Working with Youth
- GEO 1206 - Appalachian Environment OR
- HIS 1101 - United States History I OR
- HIS 1102 - United States History II OR
- HIS 2215 - Survey of African History OR
- HIS 2218 - History of Ohio
- SCC 1101 - First Year Experience


## Architectural Design Technician, CRT

## Program Code: ARCD.S.CRT•Credit Hours: 34

## Description

This program helps students develop residential and commercial architectural design skills. Design courses are combined with construction materials and building systems courses, providing a broad foundation for entry level architectural design work. Students will receive training to help them create and understand architectural drawings as well as proper use of building materials and components. Upon completion, students will be able to utilize various design and analysis software to assist with the development of architectural projects.

## Career Opportunities

Graduates are employed as designers and drafters for architectural and design-build firms. Many opportunities also exist in the building materials and assemblies' sales and supply area.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 1341 - Architectural Design I
- CAT 2101 - Architectural Design II
- CAT 2201 - Architectural Visualization
- CAT 2431 - OSHA Construction Standards
- EGV 1301 - Architectural Energy Analysis
- IND 1234 - Materials \& Textiles
- VIS 1140 - Design Processes I


## Architectural Project Technician, CRT

Program Code: ARCP.S.CRT • Credit Hours: 30

## Description

This program is designed to build skills required for managing architectural projects in a variety of professional settings. Students will receive training to help them understand architectural practice, including an understanding of building materials and components, the financial aspects of project management, and the management skills necessary to deal with the diverse population of the industry. Upon completing this program, students will be qualified to move into project management positions in architecture and similar businesses.

## Career Opportunities

Graduates are employed as project managers in the architecture and construction industry. Many opportunities exist in the building materials and assemblies sales and supply area.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 2431 - OSHA Construction Standards
- CAT 2401 - Construction Project Management
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \&

Project Delivery

- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- COM 2211 - Effective Public Speaking
- EGV 1301 - Architectural Energy Analysis
- ENG 1101 - English Composition I


## Artificial Intelligence (AI)/Autonomous Systems, STC

Program Code: UASAI.S.STC • Credit Hours: 23

## Description

This short-term certificate in Artificial Intelligence (AI)/ Autonomous Systems, which is fully embedded within the Bachelor of Applied Science degree in Unmanned Aerial Systems, gives the student the indepth knowledge they need to transform large amounts of data into actionable decisions. The program and its curriculum focus on how complex inputs - such as vision, sensor data, robotics, and huge
databases - can be used to make decisions or enhance human capabilities. The curriculum includes coursework in aviation technology, computer science, math and statistics, robotics, computational modeling, machine learning and symbolic computation. The program includes courses from the Aviation Technology, Computer Information Systems (CIS), and Mathematics Departments.

## Career Opportunities

AI / ML Scientist and Engineers rank among the top emerging jobs, their roles have grown over $650 \%$ since 2012. Job growth in the next decade is expected to outstrip growth during the previous decade, creating 11.5 M jobs by 2026, according to the U.S. Bureau of Labor Statistics. Based on the assets, capabilities, and resources focused on UAS / AVT technologies, the Dayton region and the State of Ohio are in a unique position to further secure their status as a destination of choice for this expertise. The region continues to transition from automotive/heavy manufacturing to high growth industries integral to UAS / AVT including sensors, robotics, advanced data analytics and management, and advanced materials and manufacturing. The Dayton Development Coalition and the State of Ohio are dedicating significant resources to support growth related to UAS / AVT. Building upon the leadership role that Wright-Patterson Air Force Base is taking in UAS, coupled with Ohio's aviation heritage and strong aerospace industry, Sinclair's UAS program will continue to benefit the students, institution, and the region. And will further strengthen the regional capabilities related to UAS / AVT and advance their commercial integration at the local, state, and national levels.

## Program Requirements

- AVT 2240 - Human Factors in Aviation
- AVT 3300 - Artificial Intelligence (AI) in Aviation
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 4215 - Autonomous Systems in Aviation
- AVT 4220 - Human Autonomy Teaming in Aviation
- CIS 2266 - Python for Data Analytics
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence


## Automotive High Performance, STC

## Program Code: AHPC.S.STC • Credit Hours: 25

## Description

This short-term certificate provides in-depth, hands-on experiences in various areas of high-performance engines, an ideal choice to supplement a degree-seeking student wishing to specialize in the engine and fuel induction areas. The program is also designed to prepare students for the ASE (Automotive Service Excellence) engine machinist series. Courses are dedicated to specific areas of engine development: engine blocks, cylinder head and valve train, assembly and dynamometer testing. Fuel systems for performance engines are covered as well.

Career opportunities are available in positions for automotive service technicians in dealerships, independent shops, motor sports businesses and automotive machine shops. In addition, graduates are also employed as service managers, parts managers, sales representatives or motor sports specialist.

## Program Prerequisite(s)

- AUT 1108 - Automotive Engine Systems OR
- AUT 1115 - Automotive Engine Performance I


## Program Requirements

- AUT 1108 - Automotive Engine Systems
- AUT 1115 - Automotive Engine Performance I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems


## Automotive Maintenance \& Light Repair, STC

## Program Code: MLR.S.STC • Credit Hours: 14

## Description

This certificate provides the skills and training needed to earn an entrylevel position at an automotive maintenance repair facility. Courses included in the certificate will prepare students to pass the Automotive Service Excellence Maintenance and Light Repair Certification (ASE G1) test.

## Career Opportunities

Career opportunities are available in positions for automotive maintenance technicians in dealerships, independent shops and maintenance repair facilities. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning

Systems

- AUT 1165 - Automotive Brake Systems


## Automotive Service Consultant and Advising, STC

## Program Code: AUTS.S.STC • Credit Hours: 4

## Description

The automotive service consultant short term certificate prepares for the C1 ASE Automobile Service Consultant Certificate test and the role as a service consultant/advisor in automotive repair facility.

## Career Opportunities

Students can obtain gainful employment as service consultants/ advisors at automotive repair facilities. Students are encouraged to take their C1 ASE exam Automobile Service Consultant Certification test to help secure employment.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1111 - Automotive Service Consulting \& Advising


## Automotive Technology, CRT

## Program Code: AUT.S.CRT • Credit Hours: 37

## Description

The Automotive Certificate program is designed for students who want to become automotive technicians without pursuing an associate degree. Students will expand their knowledge of the automotive service industry and secure employment with dealerships, independent service shops, machine shops and other corporate service jobs. .

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness to work and a high degree of professionalism may expect to find jobs in middle management or research occupations within major automotive corporations.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems


## Bakery Operations and Pastry Skills, CRT

## Program Code: BOP.S.CRT • Credit Hours: 35

## Description

This one year certificate focuses on basic baking as well as advanced techniques including bread making, pastry, and confections (such as chocolate work, sugar sculptures, and more).

## Career Opportunities

This certificate provides career opportunities in businesses that specialize in Breads, Fine Pastries, Chocolates, Candy's, restaurants, and the opportunity to be self-employed.

## Program Requirements

- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2118 - Artisan Breads
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional


## Bakery Specialist, STC

## Program Code: BPSE.S.STC • Credit Hours: 17

## Description

The Bakery Specialist short-term certificate program is designed to provide students the knowledge and skills necessary to be employed in a commercial retail bakery after completion.

## Career Opportunities

A student completing this short-term certificate will be eligible for a position as a baker in retail grocery baking departments or as a baker in an independent bakery.

## Program Prerequisite(s)

- HMT 1107 - Sanitation \& Safety


## Program Requirements

- HMT 1102 - Kitchen Chemistry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 1128 - Baking II \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2126 - Cake Production \& Cake Decoration
- HMT 2128 - Cake Decoration


## Description

This short-term certificate focuses on the science of baking as well as basic techniques using ingredients such as flour, leaveners, salt, sugar, dairy, fats, extracts, spices and other add-ins such as vanilla extract, chocolate chips, etc.

## Career Opportunities

This certificate provides career opportunities in businesses of bakeries and tortilla manufacturing, food and beverage stores, restaurants and other eating places, pretzel shops, and the opportunity to be selfemployed.

## Program Requirements

- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 1128 - Baking II \& Barista Basics
- HMT 2201 - Food Service Equipment, Design \& Maintenance


## Basic Drawing, STC

## Program Code: DRWG.S.STC • Credit Hours: 9

## Description

This short-term certificate provides basic proficiency in freehand drawing. The student will draw with a variety of materials including charcoal, pastel and ink. The student will be able to render threedimensional items on a two-dimensional surface and will be able to demonstrate proficiency in value, contour and perspective. This certificate will provide the student with a broad range of styles and historic sources for his or her work, whether the individual is a graphic designer or freelance illustrator.

## Career Opportunities

The Art department strives to provide students with high quality education experiences in the visual arts, and the short-term certificate in Basic Drawing prepares students to enhance their freehand drawing skills - especially professionals working in the fields of graphic design or freelance illustration.

## Program Requirements

- ART 1111 - Drawing I
- ART 1112 - Drawing II
- ART 1121 - Beginning Painting I OR
- ART 2111 - Intermediate Drawing I OR
- ART 2216 - Life Drawing \& Anatomy I OR
- ART 2221 - Intermediate Painting-Observation \& Concept OR
- ART 2222 - Intermediate Painting - The Figure


## Basic Manufacturing, CRT

## Program Code: BMFG.S.CRT•Credit Hours: 31

## Description

This certificate in Basic Manufacturing prepares the student for entry level positions in any of the following five: General Manufacturing, Computer Aided Manufacturing, Automation Technology, Mechanical Engineering Technology, and Industrial Engineering Technology. Completion of this certificate prepares the student to earn the Industry Recognized MSSC - Certified Production Technician Certificate.

## Career Opportunities

Basic Manufacturing prepares the student for entry level positions in any of the five areas within General Manufacturing, Computer Aided Manufacturing, Automation Technology, Mechanical Engineering Technology, and Industrial Engineering Technology. Completion of this certificate prepares the student to earn the Industry Recognized MSSC - Certified Production Technician Certificate.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- MET 1131 - Personal Computer Applications for Engineering

Technology

- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD


## Basic Preparation of Food, STC

## Program Code: BFP.S.STC Credit Hours: 9

## Description

This short-term certificate focuses on sanitation, knife skills, sauce making, food grade commercial equipment, and butchery.

## Career Opportunities

This certificate provides career opportunities in the businesses of Food Trucks, Restaurants, College \& University Food outlets, as well as Hospital Food outlets, Grocery Stores, etc., and the opportunity to be self-employed.

## Program Requirements

- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2207 - Butchery \& Fish Management


## Basic Quality, STC

## Program Code: IBQ.S.STC • Credit Hours: 18-20

## Description

This certificate provides the student with the basics of drafting and blueprint reading while developing AutoCAD techniques, and learning software applications that will be used throughout a career in quality. Covering various measurement techniques involving shop measuring instruments; correct use and care. Students learn the application of Geometric Dimensioning and Tolerancing (GD\&T) principles along with the Coordinate Measuring Machine (CMM) which also gives the student an Industry Recognized credential from Hexagon Intelligence for PC-DMIS for CMM 111 software. Basic Quality will prepare the student and give them the skills to improve customer relations, measure products, and processes, analyze current process control and capability and define and audit the quality management system. This certificate meets the needs of a student looking to enter many areas where the needs of basic quality knowledge are required to obtain an entry-level position.

## Career Opportunities

This certificate is a great opportunity for entry level employment in the quality control field or as an addition to other fields that will boost career opportunities by the addition of quality techniques. In addition the student will earn an Industry Recognized Certificate in OPT 1113 Coordinate Measurement from Hexagon Manufacturing Intelligence for "PC-DMIS for CMM 111".

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313 - Coordinate Measurement
- MAT 1470 - College Algebra OR
- MAT 1580 - Precalculus


## Bioscience Lab Skills, CRT

## Program Code: BLS.S.CRT • Credit Hours: 30-32

## Description

The Bioscience Lab Skills certificate will prepare students for internships and some entry level jobs in bioscience laboratories. The students will learn the background of the biotechnology industry, basic lab safety and regulation, and the practical math needed to calculate reagents, dilutions and sample analysis.

## Program Requirements

- BIO 1107 - Human Biology
- BIO 1108 - Lab for Human Biology
- BIO 1111 - General Biology I AND
- BIO 1117 - Lab for General Biology I OR
- BIO 1171 - Principles of Biology I
- BIS 1120 - Introduction to Software Applications
- BTN 1110 - Biotechnology \& Bioethics
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- BTN 1130 - Biological Reagents Preparation
- BTN 1131 - Lab for Biological Reagents Preparation
- BTN 1201 - Biotechnology Careers
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- MAT 1470 - College Algebra


## Black Studies, STC

## Program Code: AFRE.S.STC • Credit Hours: 15

## Description

Designed for students who are planning on using Black Studies to enhance their careers in Social Work, Public Education, Urban Planning, etc. The student who pursues this Short-term Technical Certificate would plan to use this to supplement their professional development or to strengthen a major for which Black Studies is a strong base.

## Career Opportunities

This certificate enhances careers in Social Work, Public Education, Urban Planning and related fields.

## Program Requirements

- AFR 1100 - African-American Studies
- HIS 1105 - African-American History
- HIS 2215 - Survey of African History
- LIT 2234 - Literature of Africa, Asia, \& Latin America OR
- LIT 2236 - African-American Literature
- PSY 1160 - Black Psychology


## Description

This certificate takes the Entrepreneurship and Business Foundations STC one step further by preparing existing or potential entrepreneurs with background issues in skills such as customer service and negotiation techniques by addressing the application of basic principles of negotiation through the introduction and analysis of the negotiation process, case studies, and simulations. This certificate contains foundational courses that apply towards AAS in Business Management/Entrepreneurship.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own business or to work in larger companies in an entrepreneurial role.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2144 - Negotiation Techniques
- MRK 2220 - Small Business Marketing
- SOC 1101 - Introduction to Sociology


## Business Information Systems/Information Processing, CRT

## Program Code: BUIP.S.CRT • Credit Hours: 30

## Description

This one-year certificate is intended to provide advanced software application training necessary to work improve efficiency and productivity and aid in business decision making.

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I


## Business Information Systems/Medical Office Specialist, CRT

## Program Code: BUMS.S.CRT • Credit Hours: 32

## Description

In this one-year certificate, students will work with various software applications, learn medical terminology, and take medical office and customer service courses that prepare them to work in a medical office environment.

## Career Opportunities

Employment opportunities include medical office receptionists, secretaries, billing/insurance clerks, and medical office administrators in physician's offices, urgent care centers, managed care organizations, laboratories, nursing homes and hospitals.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- BIS 2180 - Medical Office Simulation
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- MAT 1120 - Business Mathematics


## Business Information Systems/Personal Computers in Business, CRT

## Program Code: PCB.S.CRT•Credit Hours: 30

## Description

This one-year certificate is intended for those who want to update their knowledge of software applications and personal computer technology.

Students will learn how to use personal computers for business administration, decision support and financial applications.

## Career Opportunities

Employment opportunities include paraprofessional positions in information technology, customer service and personal computer software application troubleshooting.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1131 - Business Writing
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior


## Business Management, CRT

## Program Code: BM.S.CRT•Credit Hours: 30

## Description

Students gain an understanding of business procedures to prepare them for a management position or update the management skills of those currently employed in a managerial, administrative or office support role.

## Career Opportunities

Students completing this certificate can expect to be prepared to work as supervisors or entry-level managers in retail, manufacturing or medium and small businesses.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ECO 1100 - Introduction to Economics OR
- ECO 2180 - Principles of Microeconomics
- ENG 1131 - Business Writing
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MAN 1107 - Foundations of Business
- MAN 1110 - International Business
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- Business Management Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.

Business Management Electives

- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2220 - Small Business Marketing
- MRK 2225 - Sales Fundamentals


## Business Operations Systems Support, STC

## Program Code: BOSS.S.STC • Credit Hours: 19

## Description

Students completing this certificate will have the written and oral communication skills, as well as the computer skills, needed to effectively support computer operations for small, medium or large companies. These skills apply equally well to an entry-level help desk support position. Technical course work emphasizes operating systems and troubleshooting skills.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as help desk support, PC network technicians, IT technicians, Enterprise network technicians and Network Administrators.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- COM 2225 - Small Group Communication
- CIS 2731 - A+ Hardware \& Software
- ENG 1101 - English Composition I
- CIS 1510 - Windows Client Operating System OR
- CIS 2550 - Linux Operating System


## Business Transfer, CRT

## Program Code: BUS.S.CRT•Credit Hours: 30

## Description

This certificate is designed for the student who desires to complete Transfer Assurance Guide (TAG) courses to transfer into a four-year
business program. This certificate can be used to help students from non-business backgrounds begin preparation for entrance into a Masters of Business Administration (MBA) program by packaging the prerequisite business core courses into a convenient certificate offering. Additionally, students wanting to pursue a two-year business degree or needing to augment current work skills with academic credentials may find this certificate beneficial.

## Career Opportunities

Employers more often than in the past require four-year business degrees or evidence that students are in the process of earning these credentials. This certificate serves as a credentialing tool for students to use in their career search, as well as, for currently employed students to show further evidence of growth and academic progress toward a bachelor's degree in business.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- ENG 1131 - Business Writing
- MRK 2101 - Principles of Marketing Management
- LAW 1101 - Business Law
- OT36 Arts and Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective 3 Cr. Hr(s).


## Call Center/Customer Service, STC

## Program Code: CC.S.STC • Credit Hours: 17-19

## Description

This certificate is designed for those interested in working in a customer service center, help desk, call center, or medical scheduling environment. All students will learn customer service skills and telephone techniques, as well as software applications and keyboarding. Students then choose an area of focus to strengthen industry-specific knowledge in general call center, IT help desk, health care, or medical office.

## Career Opportunities

Since 2008, Sinclair has actively participated in the Dayton region's Contact Center Alliance (CCA), a group of over 50 area employers with call centers ranging from 5 to 2,000 employees. This alliance forecasts double digit growth over the next three years.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication
- HIM 1101 - Medical Terminology AND
- BIS 2180 - Medical Office Simulation OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe AND
- HIM 1101 - Medical Terminology AND
- MAS 1110 - Administrative Medical Assisting OR
- CIS 1107 - Introduction to Operating Systems AND
- CIS 1130 - Network Fundamentals OR
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior AND
- BIS 1230 - Spreadsheet Software OR
- BIS 1260 - Database Software


## Captioning, STC

## Program Code: CPC.S.STC • Credit Hours: 23

## Description

The Captioning Certificate is designed to prepare students for a position as a captionist in the workforce. The skills obtained will train students to provide accessible communication services to individuals with hearing loss or communication barriers. A field experience is required.

## Career Opportunities

Positions available to graduates include independent contractor and/ or staff positions.

## Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1102 - Interpreting Theory \& Best Practices
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 2401 - Captioning
- ASL 2402 - Field Placement
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II


## CDA Preparation Certificate, STC

## Program Code: CDA.S.STC • Credit Hours: 9

## Description

This certificate includes three ECE courses which serve as the preparation courses for the completion of the CDA (Childhood Development Associate) certificate. These three courses provide the required content knowledge and development of the CDA portfolio. Successful completion of these courses and passage of required on-site observation will enable students to obtain the CDA certificate through the Council of Professional Recognition (CDA Council). A grade of C or better is required in all courses.

## Career Opportunities

The CDA certificate is the entry level credential required for childcare professionals. As of July 2020 the state of Ohio will require a minimum of a CDA certificate. Given the current severe shortage of qualified workers in childcare and preschool settings, the job market is very favorable.

## Program Requirements

- ECE 1400 - Introduction to Early Childhood Education CDA Preparation
- ECE 1401 - Introductory Child Development CDA Preparation
- ECE 1402 - Healthy \& Safe Environments CDA Preparation


## Certified Production Technician, STC

Program Code: CPT.S.STC • Credit Hours: 8

## Description

This certificate covers a wide array of skills and knowledge required in manufacturing such as safety, processes and production, measurement and quality practices, and maintenance awareness. Each of the four areas allows the student to earn a certificate for that area which leads to the Manufacturing Skill Standards Council Certified Production Technician certificate. This certificate is an Industry Recognized Certificate and is approved by the Ohio Department of Higher Education. Upon completion students will be eligible for entry-level manufacturing positions where they can demonstrate these skills and knowledge in a manufacturing setting.

## Career Opportunities

Employers are actively seeking the Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) credential holders as people that have already shown an aptitude for manufacturing along with a desire to obtain entry level jobs. This 8 credit hour certificate may be one of the best investments in education leading to gainful employment available today.

## Program Requirements

- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing


## Chemical Dependency Counseling, STC

## Program Code: CDC.S.STC • Credit Hours: 12

## Description

This series of courses is designed to meet the 180 clock hours of chemical dependency specific education required by the Ohio Chemical Dependency Professionals Board to apply for licensure. It is for individuals who have previously earned or are in the process of earning at least an Associate degree in behavioral science.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 22 percent from 2018 to 2028, much faster than the average for all occupations.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2137 - Treatment Techniques in Substance Use Disorders
- MHT 2235 - Family Dynamics of Addiction


## Chemical Dependency Counselor Assistant (CDCA) Preliminary, STC

## Program Code: CDCA.S.STC • Credit Hours: 3

## Description

This one course certificate meets the educational requirements for the CDCA: Chemical Dependency Counselor Assistant Preliminary. Within this course, the following topics will be discussed: theories and fundamentals of addictive illness and physical/mental effects of psychoactive drugs; dynamics of substance related and addictive disorders on persons, families and society; knowledge of disease concept, stigmas, identification, assessment, trends in treatment and relapse process. Students will also develop insights, challenge biases and identify personal and professional issues and will learn elements of professional/ethical behaviors.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 22 percent from 2018 to 2028 , much faster than the average for all occupations.

## Program Requirements

- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary


## Chemical Dependency Counselor Assistant (CDCA) Renewable, STC

## Program Code: CDCAII.S.STC • Credit Hours: 2

## Description

This one course certificate meets the educational requirements for the CDCA Renewable credential with the Ohio Chemical Dependency Professionals Board. Content includes: addiction and treatment
knowledge, individual and group counseling, evaluation, service coordination, documentation and professionalism.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 13 percent from 2018 to 2028, much faster than the average for all occupations

## Program Requirements

- MHT 2130 - Fundamentals of Addiction Counseling CDCA Renewable


## Clinical Lab Assistant, STC

## Program Code: SP.S.STC • Credit Hours: 13-14

## Description

The Clinical Lab Assistant certificate prepares students for entry-level employment in the clinical laboratory setting performing specimen collection, quality assurance and other techniques fundamental to specimen processing. The program is designed to develop knowledge and understanding of medical terminology, lab rules and regulations, and universal precautions for a clinical laboratory.

Note: For students under age 18 there may be restrictions on participating in certain Health Science programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Employment opportunities exist for certificate completers in hospital laboratories, research laboratories, pharmaceutical companies and biotechnology companies.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1113 - Clinical Phlebotomy
- ALH 1114 - Clinical Phlebotomy Practice
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- CLT 1200 - Introduction to Clinical Laboratory
- CLT 1203 - Lab for Introduction to Clinical Laboratory
- HIM 1101 - Medical Terminology


## Clinical Phlebotomy, STC

## Program Code: CPST.S.STC • Credit Hours: 6

## Description

This certificate is intended to provide entry-level competency to students seeking employment in the area of phlebotomy in health care
settings. This certificate is also intended to provide expanded competencies and proficiencies to practicing health care professionals and students enrolled in health science programs. The students will be required to complete 105 hours of unpaid practicum during ALH 1114 Clinical Phlebotomy Practice. Students who complete this course will receive a certificate of completion.

Note: For students under age 18 there may be restrictions on participating in certain Health Science programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Completers will be able to obtain positions as phlebotomists in hospital laboratories, outpatient clinics and private medical laboratories.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1113 - Clinical Phlebotomy
- ALH 1114 - Clinical Phlebotomy Practice


## Coaching, STC

## Program Code: COA.S.STC • Credit Hours: 6

## Description

The short-term certificate in Coaching is designed to provide the foundational knowledge that is essential for coaching any sport. Coaches help athletes master new skills, enjoy competing with others and develop self-esteem. The certificate includes topics in coaching and leadership, sportsmanship, coaching diverse athletes, behavior management, sport first aid, drugs in sport, and the games approach to coaching.

## Career Opportunities

Students with a Coaching certificate will find career opportunities in the school and community setting including youth organizations, recreation centers, YMCAs and city parks and recreation organizations.

Program Requirements

- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership

Community and Public Services Specialist, CRT

Program Code: CSS.S.CRT•Credit Hours: 30

## Description

The certificate takes the Social Service Assistant certificate one step further by preparing students to work in a variety of settings.

## Career Opportunities

Community and Social Service Specialist fob duties typically include working under the supervision of a program director, director of social services, social worker, or similar title.

## Program Requirements

- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1106 - Transition Skills
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary OR

- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- CJS 1165 - Corrections OR
- SOC 2130 - Sociology of Family Violence OR
- SOC 2205 - Social Problems
- CJS 2111 - Ethics \& Professionalism in Criminal Justice OR
- SOC 1145 - Introduction to Cultural Anthropology
- ENG 1131 - Business Writing OR
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- LAW 1101 - Business Law OR
- SOC 2226 - Criminology


## Community Health Worker, CRT

Program Code: AHCN.S.CRT • Credit Hours: 31-32

## Description

The Community Health Worker program curriculum is designed to prepare the student for employment as community health workers, patient navigators, and health insurance navigators. The aim of this certificate is to provide individuals with the expertise and experience in assisting individuals and communities to navigate the U.S. community health, health care and health insurance systems. The certificate offers a combination of classroom, lab and practical training that will help the student succeed in their future career. A portion of this program will involve 210 hours of non-paid practice at various facilities. A State and Federal Background check will be required prior to starting the clinical practice.

## Career Opportunities

Community Health Workers will be educated to obtain the expertise and experience in assisting individuals and communities to navigate the U.S. community health, health care, and health insurance systems, as well as to improve the equality and cultural competence of service delivery and accomplish personal prevention and health care goals.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1105 - Overview of Holistic Health
- ALH 1107 - Core Concepts of Public Health
- ALH 1250 - Health Science Practicum
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- MAS 1102 - Clinical Medical Assisting I OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe OR
- ALH 1120 - Nurse Aide Training
- MHT 1101 - Introduction to Mental Health Services
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development


## Community Service Support, CRT

## Program Code: SWT.S.CRT • Credit Hours: 32

## Description

Students gain a better understanding of various sociological topics and how social problems can impact their communities. This certificate provides the knowledge and skills to provide assistance to Social Work and Social Service Professionals in the field and may perform duties such as providing information or referring individuals to public or private agencies for assistance, interviewing individuals or family members to compile information on social, educational, criminal, institutional, or substance abuse history; and advising clients regarding food stamps, child care, and transportation. Job duties may include transportation, visitation supervision, documentation, detention monitoring, school enrollments etc. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.m.

## Career Opportunities

A graduate of the Community Service Support certificate is employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve a degree in the Community and Public Service AAS or an AA in Social Work with additional coursework.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 2138 - Ethical Issues in the Helping Professions
- SOC 1101 - Introduction to Sociology
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2205 - Social Problems
- SOC 2226 - Criminology
- SWK 1206 - Introduction to Social Work
- OT36 Arts and Humanities $\mathbf{3}$ Cr. Hr.(s)


## Computed Tomography, STC

## Program Code: CT.S.STC • Credit Hours: 5

## Description

This short-term certificate in Computed Tomography (CT) is designed to provide radiographers certified by the American Registry of Radiologic Technologists (ARRT) with didactic and clinical education in computed tomography. Didactic courses focus on CT principles while clinical courses provide students with real-life experience and development of hands-on skills needed to pursue employment in computed tomography.

## Career Opportunities

Completion of this short-term certificate program can lead to employment in comprehensive hospitals, suburban or rural outpatient centers, surgery centers, etc. as a Computed Tomography Technologist.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- RAT 2640 - Computed Tomography Practicum
- RAT 2640 - Computed Tomography Practicum
- RAT 2641 - Principles of Computed Tomography


## Computer Aided Manufacturing Basic Machining Skills, STC

## Program Code: CAMBMS.S.STC • Credit Hours: 12

## Description

This short term certificate (STC) is designed to enhance the machining skills of students who have taken machining courses in high school or to allow individuals with little or no experience in machining to quickly obtain a certificate which may in turn qualify them for an entry level position in a machining company. Course work is focused on introductory levels of manual machining and basic operation of CNC machines. This STC is the first half of the Computer Numerical Control Technology short term certificate and will provide students with a milestone of completion and the ability to continue their education up to and including a two year Associate of Applied Science degree in CNC operations.

## Career Opportunities

Students who complete this certificate will become eligible for employment at an introductory level in the high tech field of machining. All courses contained within this certificate may be applied towards a degree in CNC operation; a high demand, high paying field.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists

Computer Aided Manufacturing Precision Machining, STC

Program Code: CAMPM.S.STC • Credit Hours: 18

## Description

This certificate is designed to provide basic precision machining skills to workers entering the field of manual machining. It is the first half of the Advanced Precision Machining Certificate and is provided for students who are wishing to enter the workforce with the minimum skill level required to become an effective machinist. All courses in this short-term certificate will lead to an AAS degree in Computer Aided Manufacturing Precision Machining. Course work focuses on basic machining skills necessary to operate manual lathes, mills, and grinders.

## Career Opportunities

Prepares individuals for entry level positions in precision machining (manual lathes, mills, grinders).

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Computer Numerical Control Technology, STC

Program Code: CNC.S.STC • Credit Hours: 24

## Description

The Computer Numerical Control (CNC) Technology short-term certificate program is designed for individuals who are looking to upgrade their current manufacturing skills along with students who are interested in pursuing entry-level careers in the area of CNC machining. Coursework is focused primarily in the area of CNC lathe and mill operation, setup and programming. The courses included in this short-term certificate apply directly to the associate degree in Computer Aided Manufacturing, CNC Technology option.

## Career Opportunities

Prepares individuals for basic entry level jobs in CNC manufacturing.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2145 - Shop Floor Programming
- CAM 2204 - Computer Numerical Control Lathe Programming
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering Technology


## Computer Support Technician, CRT

## Program Code: SUP.S.CRT•Credit Hours: 31

## Description

Computer Support Technicians provide first level support for users on computers, software, mobile devices and other devices connected to a network. Students will learn to provide technical support and problemsolving of operating systems, computer networks, software applications, and will utilize interpersonal communication and customer service fundamentals. Students will have the opportunity to earn A+ certification, Microsoft Office Specialist (MOS) certifications and customer service certification in specific courses in the curriculum.

## Career Opportunities

Program prepares students to for entry-level positions as computer support technician, desktop support technician, IT help desk technician/representative, customer support specialist, technical support specialist, or IT service desk specialist/technician.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2731 - A+ Hardware \& Software
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1131 - Business Writing


## Construction Administration, STC

## Description

This program is designed for experienced construction industry personnel to improve their construction administration skills. Students will receive training to help them understand construction from an administrative perspective, including an understanding of various project delivery methods, contractual obligations and responsibilities, the financial aspects of construction, change management, and the skills necessary to deal with the diverse population of the industry. Upon completing this program, personnel will be qualified to move into construction administration positions in the industry.

## Career Opportunities

Upon completing this program, craftspeople will be qualified to move into construction administration positions within the construction industry.

## Program Requirements

- CAT 1201 - Construction Methods \& Materials
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \&

Project Delivery

- CAT 2630 - Architectural Practice Project Deliverables \&

Contractual Obligations

- CAT 2640 - Construction Project Change Management


## Construction Supervisor, STC

## Program Code: CNTS.S.STC • Credit Hours: 25

## Description

This program is designed for experienced craftspeople of the construction industry to improve their supervisory and leadership skills. Students will receive training to help them understand the building construction industry from a management perspective, including an understanding of building materials and components, the financial aspects of building construction and the management skills necessary to deal with the diverse population of the industry. Heavy emphasis will be placed on safety. Upon completing this program, craftspeople will be qualified to move into management positions in the construction industry.

## Career Opportunities

Upon completing this program, craftspeople will be qualified to move into management positions within the construction industry.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1141 - Reading Architectural Drawings
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1211 - Construction Materials Testing
- CAT 1401 - Construction Cost Estimating
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials
- COM 2206 - Interpersonal Communication


## Construction Technician, STC

## Program Code: CNTC.S.STC•Credit Hours: 19-21

## Description

The purpose of this certificate is to develop knowledgeable construction workers with basic skills in construction. With a combination of classroom education, practical lab exercises and co-op internships, students will exit this certificate program with a solid introduction into carpentry, concrete finishing and residential electrical systems.

## Career Opportunities

Entry-level construction workers are in continuous demand for residential and commercial construction.

## Program Requirements

- CAT 1701 - Construction Craft Skills/Concrete OR
- CAT 1810 - Construction Techniques I
- CAT 1721 - Structural Framing Systems OR
- CAT 1820 - Construction Techniques II
- CAT 1741 - Residential Electrical Systems OR
- CAT 1830 - Construction Techniques III
- CAT 1761 - Interior \& Exterior Finishes OR
- CAT 1840 - Construction Techniques IV
- CAT 1781 - Construction Project
- CAT 2702 - Construction Management Technology Internship OR
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials


## Continuous Process Improvement, STC

## Program Code: CTIM.S.STC•Credit Hours: 12

## Description

This short-term certificate promotes technical communication skills and teamwork, project management skills, lean manufacturing and continuous improvement skills, application of quality principles, statistics and probability theories, and problem-solving skills as they relate to process improvement. This program reflects the underlying skills necessary for the successful application of six sigma methodologies and provides practice in measuring and improving processes that suffer from quality, throughput, and waste problems. The
courses in this short-term certificate apply directly to the Industrial \& Systems Engineering Technology (OPTIO.S.AAS) degree.

## Career Opportunities

This program reflects the underlying skills necessary for the successful application of six sigma and lean methodologies. A typical title for an employee with these skills is Process Improvement Specialist.

## Program Requirements

- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt


## Corrections Officer, STC

## Program Code: CJCO.S.STC • Credit Hours: 24

## Description

This certificate is designed to provide the student with the basic skills necessary for entry-level employment as a corrections officer. All courses can be applied to the Associate of Applied Science Degree in Corrections.

## Career Opportunities

The Corrections Officer Certificate will prepare students for a broad range of careers in local and state correctional facilities in addition to private prison corporations.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer

Academy

- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- ENG 1101 - English Composition I


## Corrections, CRT

## Program Code: COR.S.CRT • Credit Hours: 33

## Description

This certificate is designed to provide the student with the basics necessary for entry-level employment in a correctional environment. All courses can be applied to the Associate of Applied Science Degree in Corrections, if desired.

## Career Opportunities

There are openings in local and state correctional facilities, local nonprofit agencies providing correctional services, as well as employment through private prison corporations.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer Academy
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- SOC 1101 - Introduction to Sociology


## CPA Exam Eligibility: Accounting Component, STC

## Program Code: CPAACC.S.STC • Credit Hours: 24

## Description

In order to be eligible to sit for the CPA examination in the state of Ohio, a candidate must have 24 semester hours of business courses plus 30 semester hours of accounting courses. This certificate is designed for the student to obtain the accounting courses to sit for the CPA exam. It will provide the pathway for a student who has earned a business bachelor's degree to transition to a career in accounting. If a student has a non-business bachelor's degree, they will also need to complete the CPA Exam Eligibility: Business Component certificate.

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1510 - Computerized Accounting Systems
- ACC 2101 - Intermediate Accounting I
- ACC 2102 - Intermediate Accounting II
- ACC 2211 - Cost Accounting
- ACC 2212 - Managerial Accounting \& Finance
- ACC 2321 - Federal Taxation
- ACC 2435 - Auditing
- ACC 2322 - Advanced Taxation OR
- ACC 2510 - Advanced Accounting


## CPA Exam Eligibility: Business Component, CRT

Program Code: CPABUS.S.CRT • Credit Hours: 30

## Description

In order to be eligible to sit for the CPA examination in the state of Ohio, a candidate must fulfill the basic requirements in both business and accounting courses. This certificate is designed for the student to obtain the business courses necessary to sit for the CPA exam. It will provide the pathway for a student who has earned a non-business bachelor's degree to transition to a career in accounting.

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- LAW 1101 - Business Law
- MAN 2150 - Management \& Organizational Behavior
- Accounting Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- MRK 2101 - Principles of Marketing Management

Accounting Electives

- BIS 1260 - Database Software
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1350 - Web Site Development with HTML \& CSS
- ENT 2140 - Small Business Finance
- FIN 2450 - Personal Finance
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2155 - Management Information Systems
- MRK 2135 - Digital Marketing
- MRK 2225 - Sales Fundamentals


## Culinary Management, CRT

## Description

This certificate takes the Food Production Specialist short-term certificate one step further by preparing students for management positions in the catering and food service industry. This certificate highlights customer service skills by incorporating concepts of the American business system and basic principles of the free market system along with fundamental tenets necessary for understanding management, motivation, and behavior in organizational settings. This certificate contains foundational courses that apply towards an Associate of Applied Science in Hospitality Management and Tourism/Culinary Arts.

## Career Opportunities

The restaurant industry is open to ex-offenders and is one of the fastest growing fields in the service sector of a global economy, 16.5 million people are currently working in this industry

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- HMT 1101 - Basic Culinary Skills
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2215 - Hospitality Cost Controls
- MAT 1120 - Business Mathematics


## Culinary Skills and Food \& Beverage Operations, CRT

## Program Code: CSFO.S.CRT•Credit Hours: 36

## Description

This one-year certificate focuses on back-of-the-house talents in culinary arts as well as the skills necessary to operate and oversee front-of-house tasks in most food \& beverage operations.

## Career Opportunities

This certificate provides career opportunities in the businesses of Food Trucks, Restaurants, College \& University Food outlets, as well as Hospital Food outlets, Grocery Stores, etc., and the opportunity to be self-employed. This certificate is not only skills oriented, but also has supervisory components as well.

## Program Requirements

- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1125 - Beverage Management
- HMT 1129 - Restaurant Desserts
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2207 - Butchery \& Fish Management
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional


## Customer Service Specialist, STC

## Program Code: CUS.S.STC • Credit Hours: 3

## Description

This one course certificate is designed for those seeking employment within a call center environment or those interested in improving their customer service skills and telephone techniques. Call centers have become quite sophisticated with effective measures for productivity. Students will learn how a call center operates and how the productivity measures are used.

## Program Requirements

- BIS 1400 - Customer Service


## Cyber Investigation, CRT

## Program Code: CYSEC.S.CRT • Credit Hours: 33-34

## Description

Students will learn computer network protection, maintenance and usage of computer hardware and software, management of networks and operating systems, and criminal and constitutional law and IT criminal investigation, which includes evidence procedures and computer forensics.

## Career Opportunities

The Cyber Investigation Certificate will prepare students for careers in the areas of computer network protection, managing networks and operating systems and IT criminal investigation, which includes evidence procedures and computer forensics. Job titles include but are not limited to: Intelligence Analyst, IT Specialist (Government Breakout Codes 2210), Systems Administrator, Network Engineer, Information System Security Manager, Cyber Security Incident Response Specialist and Private Investigator.

Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- CIS 2808 - Introduction to Computer Forensics
- CIS 2550 - Linux Operating System OR
- CIS 2731 - A+ Hardware \& Software
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2209 - Computer Crime
- CJS 2295 - Criminal Justice Science Seminar


## Data Analytics, CRT

## Program Code: DA.S.CRT • Credit Hours: 33

## Description

This certificate prepares students for entry-level data analytics positions requiring knowledge, setup and usage of business intelligence and data analysis solutions. Data analytics is expanding in businesses, government agencies and not-for-profit organizations, enabling them to make better decisions utilizing appropriate data and information. Students will have the ability to structure data and prepare reports in a way that is meaningful to business, government agency and not-forprofit organization users. Course work will include database concepts, data modeling, SQL, data analysis, data mining tools, mathematical and statistical techniques, project management and systems analysis. Emphasis is placed on strong communication skills necessary to interact with key users and understand their requirements.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts and network engineers.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions
- MAT 1455 - Introduction to Data Science
- MAT 2170 - Business Statistics I
- MAT 2180 - Business Statistics II


## Data and Information Management, STC

## Program Code: DIM.S.STC • Credit Hours: 18

## Description

Business analytics is expanding across industries as data is being used to inform business decisions. Students will learn to use various software applications to extract, prepare and visualize data to make business decisions.

## Career Opportunities

Prepares students for entry-level business analytics positions requiring knowledge, setup, and usage of business intelligence and business solutions.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- CIS 1160 - Introduction to Data Literacy
- CIS 2265 - Data Visualization with Tableau
- MAT 1120 - Business Mathematics


## Data Fundamentals, STC

## Program Code: DF.S.STC • Credit Hours: 23

## Description

This short term certificate provides the fundamental skills needed to prepare the IT professional for careers in data analytics. Students will have the ability to mine, organize, analyze, and visualize data in a way that is meaningful to organizations. All courses in this short-term certificate apply to the Data Analytics degree.

## Career Opportunities

Opportunities include positions such as Data Engineer, Data Analyst, Business Intelligence Analyst, Data Manager, Visualization Analyst and Business Systems Analyst.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions
- MAT 1455 - Introduction to Data Science


## Data Literacy Foundation, CRT

## Program Code: DL.S.CRT • Credit Hours: 32

## Description

This certificate will prepare students to work in a business setting and assist a data technician or data scientist with data management.
Students will learn how to collect, interpret, analyze, and turn raw data into meaningful, actionable insights. Students will gain the programming, math, visualization, and technical skills needed to solve specific problems and challenges within an organization. A data literate person has the ability to read, work with, analyze, and argue with data.

## Career Opportunities

Include the following: Data Analyst, Business Analyst, Data Analytics Manager, Business Intelligence Analyst and Data Mining Specialist.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- CIS 1130 - Network Fundamentals
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- MAT 1455 - Introduction to Data Science


## Deaf Studies ASL.S.STC

## Program Code: ASL.S.STC • Credit Hours: 18

## Description

Students completing this certificate will obtain valuable knowledge regarding Deaf Culture and American Sign Language. This certificate shows a conversational level of American Sign Language skill. Students seeking another degree or certificate may find this credential allows them to highlight additional language skills. This certificate does not teach interpreting nor is the holder of this certificate qualified as an ASL-English Interpreter. A grade of C or better is required in all ASL courses.

## Career Opportunities

Students may pair the Deaf Studies Short Term Certificate with any field in which they interact with people. As the third most used language in the United States, American Sign Language is beneficial to any individual in any career field. Students will be able to use the skills learned during the Deaf Studies Short Term Certificate courses to communicate directly with Deaf/deaf/Hard of Hearing/DeafBlind/DeafDisabled users of American Sign Language.

## Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 1228 - Intermediate American Sign Language I
- ASL 1229 - Intermediate American Sign Language II
- ENG 1101 - English Composition I


## Dental Assisting, STC

## Program Code: DAS.S.STC • Credit Hours: 17

## Description

The student will be introduced to the fundamentals of working in a dental office as a chair-side dental assistant. Concepts and techniques of basic equipment, four-handed dentistry, oral evacuation, instrument identification, and proper use are discussed. Introduction to dental specialties are discussed. Oral examination, charting, medical and dental histories, sterilization, lab, and infection control procedures are emphasized. You are encouraged to complete Cardiopulmonary Resuscitation for the Health Care Provider (or ALH 1130 - Basic Life Support Training for Healthcare Provider) prior to entry to the Dental Assisting program. However, you can take it the first semester. Note: ALH 1130 will be waived for anyone with proof of American Heart Association Healthcare Provider Basic Life Support, see Academic Advising. Upon completion of this short-term certificate the graduate will be eligible to sit for the American Medical Technologies RDA examination. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Career options may vary according to state practice act restrictions. Dental assistants have a variety of career opportunities in a wide range of employment settings, including private practice, specialty practice, hospitals, HMOs, community health programs, school systems, dental product research, military bases, and secondary education settings.

## Program Prerequisite(s)

- ALH 1130 - Basic Life Support Training for Healthcare Provider AND
- Approval of Department AND
- GPA of 2.0 or Higher AND
- Completion of SCC Distance Learning Course AND
- Completed Program Application


## Program Requirements

- ALH 1130 - Basic Life Support Training for Healthcare Provider
- COM 2206 - Interpersonal Communication
- DAS 1102 - Introduction to Dental Assisting Terminology
- DAS 1104 - Dental Assisting Techniques \& Materials I
- DAS 1105 - Lab Dental Assisting Techniques \& Materials I
- DAS 1204 - Dental Assisting Techniques \& Materials II
- DAS 1205 - Lab Dental Assisting Techniques \& Materials II
- DAS 1108 - Dental Assisting Office Management
- DAS 1206 - Dental Assisting Radiography
- DAS 1207 - Lab Dental Assisting Radiography


## Program Code: VISDP.S.STC • Credit Hours: 20

## Description

This certificate provides an introduction to the design process including hand sketching, development of thumbnails, digital illustration and imaging, page layout; and, composition techniques to support a variety of entry-level design positions. Students will be exposed to the latest version of the Adobe products.

## Career Opportunities

Students will be able to obtain entry-level positions in the field of print/graphic design.

## Program Requirements

- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1150 - Design Processes II
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production


## Dietary Manager, STC

## Program Code: DMST.S.STC • Credit Hours: 16

## Description

Graduates of the Dietary Manager (DM) Program are trained foodservice professionals in health care delivery systems. They understand basic nutritional needs of clients and work in partnership with dietitians, who offer specialized nutritional expertise. Approved by the Association of Nutrition and Food Professionals (ANFP), the curriculum includes 12 semester credit hours of classroom instruction, 2 semester credit hours of food lab instruction, and 200 hours of management and clinical directed practice coordinated by a Registered Dietitian Nutritionist (RDN). A minimum of 25 clinical directed practice hours are directly supervised by a RDN. Students are required to complete these field experiences at area community, foodservice and health care facilities. The program offers two tracks; one for students pursuing careers in Nutrition and Dietetics, and another track for students pursuing careers in Hospitality Management \& Tourism. Both tracks are designed to be completed in two (2) part-time consecutive terms. As an integral member of the health care and foodservice management teams, dietary managers are responsible for maintaining cost/profit objectives, purchasing goods and services for the department and supervising staff. Students of Sinclair's Dietary Manager Program are eligible to become pre-professional members of the Association of Nutrition \& Foodservice Professionals (ANFP), a nationally recognized organization that can be reached at PO Box 3610, St. Charles, IL 60174, 1-800-323-1908, www.anfponline.org This specially designed program enables students to enjoy benefits of ANFP membership while attending school. Graduates are eligible for professional ANFP membership. Benefits include networking, professional growth, educational enrichment, and developing leadership skills. Completion of the DM Program and successfully passing a national credentialing exam will enable graduates to become Certified Dietary Managers, Certified Food Protection Professionals (CDM, CFPPs) in accordance
with the Certifying Board for Dietary Managers at https://www.cbdmonline.org/. The DM Program is fully approved by the Association of Nutrition and Foodservice Professionals (ANFP). Students must pass all DM certificate program courses with a "C" or better. The Sinclair nutrition and dietetics programs are open to those age 16 and older.

## Career Opportunities

Graduates of Sinclair's Dietary Manager program can find employment in nutrition and dietary departments in hospitals, long-term care facilities, day care centers, school foodservice systems, correctional institutions and other noncommercial foodservice settings. Dietary managers may work as food service directors, assistant foodservice directors, supervisors, clinical care professionals, multi-department managers, high-level administrators in large service organizations, consultants or entrepreneurs.

## Program Requirements

- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2180 - Medical Nutrition Therapy for Dietary Managers
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2735 - Foodservice Retail Business Management \& MidProgram Assessment
- DIT 2740 - Retail Business Management Directed Practicum


## Digital Marketing Analytics, STC

## Program Code: DMA.S.STC • Credit Hours: 12

## Description

The Digital Marketing Analytics Short-Term Certificate is designed to introduce, develop and reinforce basic digital marketing analytics skills and technical applications. Graduates learn how to monitor digital campaigns, collect metrics, and report findings using Google Analytics and other industry-relevant digital analysis applications. The ten-year occupational outlook for digital marketing specialists shows an anticipated $24 \%$ growth potential. All courses in this certificate can be applied to the Associate of Applied Science in Digital Marketing.

## Career Opportunities

Students obtaining the Digital Marketing Analytics Certificate will be able to work in any size organization that is using digital marketing and social media marketing. The certificate is not only for individuals that are new to the field of marketing, but to those individuals that are already working in the field, and want to update their skill set to include digital marketing analytics.

## Program Requirements

- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2250 - Digital Marketing Analytics


## Digital Marketing Communications, CRT

## Program Code: MRK.S.CRT • Credit Hours: 33

## Description

Digital Marketing professionals are essential in helping businesses and organizations establish and cultivate a strong Internet presence. Students will develop a basic understanding of critical components of a digital marketing campaign such as marketing technologies, advertising and public relations, sales fundamentals and lead generation, customer engagement and social media, as well as marketing segmentation tools including geographic information systems. Students will have the opportunity to learn new media theories and marketing approaches while gaining hands on experience with digital marketing tools.

## Career Opportunities

Digital marketing specialists have opportunities for marketing communications, technical and management positions at all levels of virtually every type of business including small and medium-sized businesses, advertising agencies, global corporations, non-profit organizations and even government agencies.

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2250 - Digital Marketing Analytics


## Digital Marketing Technologies, CRT

## Program Code: MRKTEC.S.CRT • Credit Hours: 31

## Description

The Digital Marketing Technologies certificate will provide students with both theoretical and practical applications of digital marketing strategies and tools. This certificate will cover the foundational concepts in digital marketing including fundamental marketing
concepts, advertising strategies, digital marketing approaches and tools, retailing and e-commerce, customer engagement and social media, graphic design, website development, consumer behavior and a marketing internship.

## Career Opportunities

Students completing this certificate may obtain an entry level position in digital marketing with state and/or local government, small, medium or large sized businesses, and non-profit organizations.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- MAN 1107 - Foundations of Business
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2236 - Consumer Behavior
- VIS 1140 - Design Processes I


## Digital Systems, STC

## Program Code: DS.S.STC • Credit Hours: 12

## Description

This short-term certificate offers knowledge and basic skills to work in the electronics industry as an entry-level support technician for digital systems. Courses provide knowledge about basic electrical measurement techniques, prototype assembly of electrical circuits, digital logic, Boolean algebra and basic digital systems. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and lab skills. The courses in this certificate lead into an associate degree in Electronics Engineering Technology at Sinclair.

## Career Opportunities

Provides opportunity to work as a support technician in the digital electronic field.

## Program Requirements

- EET 1150 - DC Circuits
- EET 2261 - Microprocessors
- EET 1131 - Digital Electronics

Digital Thread Engineering Technology, STC

Program Code: DTET.S.STC • Credit Hours: 16

## What is the program about?

The Digital Thread Engineering Technology short-term technical certificate prepares students for entry-level positions requiring an ability to identify and effectively utilize digital thread and engineering tools related to manufacturing, logistics, data management, and cyber security.

## Career Opportunities

There is a rapidly growing need for technicians with experience in digital thread engineering technology. Students that complete this program will be well positioned to enter or advance in positions focused digital thread technologies, including those related to technician level manufacturing, logistics, data management, cyber security. Requirements for these skills are prevalent and growing in positions in government, industry, and academic organizations, both locally and nationally. Additionally, students completing the program will be prepared to pursue additional certificate and degree programs to further enhance their capabilities and skills.

## Program Requirements

- BIS 1010 - Digital Thread Data Management
- CIS 1010 - Digital Thread Cyber Security
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- MAN 1010 - Digital Thread Enhanced Logistics
- MET 1131 - Personal Computer Applications for Engineering Technology OR
- MET 1161 - Software Tools for Engineering Technology


## Dining Assistant, STC

## Program Code: DAST.S.STC • Credit Hours: 1

## Description

The Dining Assistant Program is a State of Ohio approved training course which provides practical skill development in feeding techniques and working with populations with self-feeding difficulties with a focus on the elderly. The program is designed to ensure that Dining Assistants have a basic understanding of the nutritional needs of long term care residents, communications and interactions involving the residents and staff, as well as behavior challenges and safety procedures involving residents.

## Career Opportunities

Students successfully completing the Dining Assistant short term certificate program will be eligible to apply for feeding assistant positions within the nutrition departments of long term care facilities in the state of Ohio.

## Program Requirements

- DIT 2101 - Dining Assistant Dietary Aide


## East Asian Studies, STC

## Program Code: EAS.S.STC • Credit Hours: 17

## Description

This short-term East Asian Studies Certificate is an interdisciplinary program consisting of five courses on East Asian history, language, culture, and business in the global context. The program is designed to provide students with in-depth study and training in the listed areas to complement their major field of study. The program prepares students for multiple academic and career paths with useful skills and worldly perspectives.

## Career Opportunities

Upon completion of the East Asian Studies certificate program, students will gain proficiency in East Asian history and Chinese or Japanese language with intercultural and international business skills. Students will be able to pursue careers in the following capacities: Employment in multicultural and international corporations, Work at a local company related to East Asia like Fuyao Inc. or Honda Inc., be part of the foreign services, military service, judicial system, or in language translation, work as a consultant in fields like international politics, financial advisor for Asian markets, international marketing specialist, teaching at schools or universities or become a politician or a community leader.

## Program Requirements

- CHN 1101 - Elementary Chinese I AND
- CHN 1102 - Elementary Chinese II

OR

- JPN 1101 - Elementary Japanese I AND
- JPN 1102 - Elementary Japanese II
- COM 2245 - Intercultural Communication
- HIS 2217 - Survey of East Asian History
- MAN 1110 - International Business


## Electrocardiography, STC

## Program Code: ELST.S.STC • Credit Hours: 3

## Description

This program is intended to provide expanded skills among health care professionals as well as current Health Sciences students to increase marketability for employment. Electrocardiography (ECG) Technicians operate equipment that records and measures heart activity. These measurements are used to assist cardiologists and other physicians in diagnosing and treating cardiac (heart) and peripheral vascular (blood vessel) problems. Students who complete this program will receive a Short-Term Technical Certificate in Electrocardiography. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Electrocardiography Technician.

## Program Requirements

- ALH 1110 - Principles of Electrocardiography


## Emergency Medical Responder, STC

## Program Code: EMR.S.STC • Credit Hours: 2

## Description

Emergency Medical Responders (EMR's) are personnel, typically not found within the healthcare setting, who as part of their job have to care for the sick and injured before an ambulance arrives. These individuals are educated to stabilize patients using very limited amounts of medical equipment. Police officers, safety officers, and others who would be expected to arrive at the scene of an injury or illness before the ambulance could benefit from this education. Students will use lecture and laboratory environments to learn the skills needed to care for patients. For more information, contact the EMS department at (937) 512-5338 for an entrance application packet.

## Accreditation

This program is accredited by the Ohio Department of Public Safety, Division of Emergency Medical Services. Graduates of this program are eligible to take the National Registry of Emergency Medical Technicians EMR examination. Contact the EMS office at Sinclair Community College for additional information about accreditation or national testing.

## Career Opportunities

EMRs education can be used as within firefighting, police or safety officer roles. Most companies/departments will not hire a person who is solely an EMR. The purpose of this education is to augment the skills of those who may need to care for the sick and injured before the ambulance arrives.

## Program Requirements

- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory


## Emergency Medical Technician, STC

## Program Code: EBST.S.STC • Credit Hours: 7

## Description

Emergency Medical Technicians (EMTs) are essential members of the health care team who provide time sensitive care to patients. These individuals take the emergency department to people's homes, to highways and to other remote locations. EMTs bring life-saving equipment and knowledge to bear in an effort to reduce patient's suffering and to save lives. Students will use lecture, laboratory and
real world exposure to emergencies to learn the skills needed to care for the sick and injured in the out-of-hospital environment. The program is offered to provide students with variability and flexibility in scheduling. For more information, contact the EMS department at 937-512-5338 for an entrance application packet.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidates state licensures/certifications - not whether the candidate is degreed. When local departments are hiring full-time employees, many of them are looking for paramedic/firefighters.

## Program Requirements

- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician


## Energy and Sustainability Technician, STC

## Program Code: EST.S.STC • Credit Hours: 8

## Description

This short-term certificate is intended for students who are interested in an entry-level position in the energy and sustainability technician field. The student will have the opportunity to earn their OSHA-10 card and have the potential to sit for the LEED Green Associate exam and Building Analyst exam by the Building Performance Institute (BPI).

## Career Opportunities

Career opportunities for students completing this short-term certificate include entry-level building positions as laborers, technicians, installers, operators, inspectors, and data collectors.

## Program Requirements

- CAT 1431 - OSHA Construction Standards 10 Hour
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- EGV 2700 - Energy Management Technology Internship


## Energy Technology, CRT

Program Code: ENRGY.S.CRT • Credit Hours: 30-31

## Description

This program is intended for students who are interested in an entrylevel position in the field of energy services. This program consists of HVAC, energy analysis and management, energy services and renewable energies courses.

## Career Opportunities

Energy technicians who can perform energy audits and test structures for energy efficient characteristics are in increasing demand.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1601 - Building Electric \& Controls
- EGV 1101 - Alternate \& Renewable Energy Sources
- EGV 1251 - Introduction to Energy Management Principles
- EGV 1301 - Architectural Energy Analysis
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- EGV 2700 - Energy Management Technology Internship
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings


## Entrepreneurship and Business Foundations, STC

Program Code: EBP.S.STC • Credit Hours: 24

## Description

This certificate prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to a traditional management course, the following key areas are emphasized for entrepreneurs: financial plan development, marketing plan development and business plan development.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own business or to work in larger companies in an entrepreneurial role.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- SOC 1101 - Introduction to Sociology
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MRK 2220 - Small Business Marketing


## Entrepreneurship, CRT

## Program Code: ENT.S.CRT•Credit Hours: 33

## Description

This certificate prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to traditional management courses, the following key areas are emphasized for entrepreneurs: financial plan development, marketing plan development and business plan development.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own businesses or to work in larger companies in an entrepreneurial role.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MRK 2220 - Small Business Marketing
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management OR
- MRK 2135 - Digital Marketing


## Expanded Functions for Dental Auxiliaries, STC

## Program Code: EFDA.S.STC • Credit Hours: 13

## Description

The Expanded Functions Dental Auxiliary (EFDA) Certificate is designed to prepare graduates for positions in private practice dental offices, dental clinics, federal, state and municipal health facilities. The Ohio State Dental Board allows Certified Dental Assistants, Registered Dental Assistants, and Registered Dental Hygienists to enroll in this training. Emphasis is placed on sealants, amalgam restorations, composite restorations and temporary restorations. Students will receive instruction and hands-on experience in restorative dentistry as it relates to expanded functions in Ohio. Once the training is complete, the student must take a state written and practical exam to demonstrate proficiency in placement of dental restorations. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

The Expanded Functions Dental Auxiliary Profession offers opportunities with excellent income and flexible scheduling. While most EFDAs work in general and specialty dental offices, alternative
career opportunities are available. These include public health departments, community programs and clinics, teaching institutions, consumer advocate and consulting.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- EFD 1102 - Dental Anatomy for Dental Auxiliaries
- EFD 1202 - Expanded Functions for Dental Auxiliaries I
- EFD 1203 - Lab for Expanded Functions for Dental Auxiliaries I
- EFD 1302 - Expanded Functions for Dental Auxiliaries II
- EFD 1303 - Lab for Expanded Functions for Dental Auxiliaries II


## Family Advocate, STC

## Program Code: FAMA.S.STC • Credit Hours: 18

## Description

A short-term certificate competency based, task-specific training for Head Start Family Specialists, Family Service Specialists and Family Workers whose job it is to provide the support services which are needed by families to enhance the quality of their family life. Courses in this curriculum will focus on achieving proficiency in the following areas: social work core knowledge, values, skills; social work ethics and theory, interviewing and documentation; group/organization and micro-level methodologies; collaboration and advocacy; understanding family dynamics, barriers to self-sufficiency, conflict resolution, cultural and social diversity issues, the relationship between social problems and institutional responses; aid in the development of beginning computer skills.

## Career Opportunities

This certificate enhances career opportunities in agencies and organizations that provide a wide variety of social services.

## Program Requirements

- COM 2206 - Interpersonal Communication
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work


## Fast Track Programming, STC

## Program Code: FTPA1.S.STC • Credit Hours: 19

## Description

This certificate assures that individuals are equipped with current software development skills. It is intended either for experienced
programmers looking to update their skill set or for people wishing to make a career change into the Information Technology field. The certificate focuses on the latest software development languages and approaches, object-oriented concepts and database theory.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts, and network engineers.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1202 - C++ Software Development OR
- CIS 2266 - Python for Data Analytics OR
- CIS 2207 - Data Structures \& Algorithms
- CIS 2165 - Database Management
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II


## Fine Art Photography, CRT

## Program Code: PHOT.S.CRT • Credit Hours: 30

## Description

The Fine Art Photography Certificate is designed for the student seeking a career as a fine artist. The certificate serves as a stand-alone program of study for individuals wishing to open photography studios or as a complementary base for students intending to complete the Associate of Arts, Art degree and continue their studies at four-year colleges and universities. The certificate ensures students gain a strong visual knowledge of current and historical photographic mediums. Students are exposed to studio photography, studio lighting techniques, alternative processes, darkroom-based and digital photography. This program maintains a strong foundation in film-based processes and darkroom printing techniques. The student will learn to operate small format 35 mm , medium format 120 , large format manual film cameras as well as digital camera operation. Basic computer imaging techniques will also be addressed.

## Career Opportunities

The Fine Art Photography Certificate prepares students to open their own photography studios or to transition into the Associate of Arts, Art degree program, where upon completion, they may continue their studies at four-year colleges, universities, or standalone art schools.

## Program Requirements

- ART 1161 - Black \& White Darkroom Photography I
- ART 1162 - Black \& White Darkroom Photography II
- ART 1170 - Alternative Photographic Processes
- ART 1171 - Studio Photography
- ART 1175 - Computer Photography
- ART 2235 - History of Photography
- ART 2265 - Digital Color Photography I
- ART 2294 - Photography Portfolio Development
- CHE 1011 - Chemistry in Modern Life for General Education
- CHE 1051 - Lab for Chemistry in Modern Life for General Education
- MAT 1110 - Math for Technologists OR
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1445 - Quantitative Reasoning


## Fire Department Company Officer, STC

## Program Code: FCO.S.STC • Credit Hours: 5

## Description

Develop management, supervision and leadership skills that companygrade officers need to manage and command multi-company fire situations. This certificate meets the objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications Level II.

## Accreditation

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Program Prerequisite(s)

- Approval of Department AND
- Certified Ohio Firefighter AND
- At least three years active duty experience.


## Program Requirements

- FST 2251 - Fire Officer I
- FST 2252 - Fire Officer II


## Fire Department Executive Officer, STC

## Program Code: FEO.S.STC • Credit Hours: 6

## Description

Develop management, supervision and leadership skills required by upper-level executive-grade officers. These skills are needed to effectively manage fire protection and emergency services in today's complex fire service environment and command complex multicompany and multi-jurisdictional emergency incidents. This certificate meets objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications Levels III and IV.

## Program Prerequisite(s)

Approval of Department

Program Requirements

- FST 2253 - Fire Officer III
- FST 2254 - Fire Officer IV


## Firefighter EMT, STC

## Program Code: FEMT.S.STC • Credit Hours: 19

## Description

This program provides training as outlined by the Ohio Division of Emergency Medical Services (state accrediting body) for Firefighter I, Firefighter II and Emergency Medical Technician. Sinclair Community College complies with all requirements as outlined by the Ohio Division of Emergency Medical Services. Successful students will be eligible to sit for state certification testing and eventually be eligible to become licensed/certified as a Firefighter I, Firefighter II, and EMT.

## Accreditation

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Career Opportunities

Students completing this program will find career opportunities in fire departments, private EMS agencies, and hospitals.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Food Production Specialist, STC

Program Code: FPS.S.STC • Credit Hours: 28

## Description

The Food Production Specialist Certificate combines classroom instruction and laboratory experience in food preparation and service for the restaurant and catering industry.

## Career Opportunities

Employment opportunities after completing the Food Production Specialist Certificate and Bakery Specialist or Pastry Specialist include: short order cook, fast food cook, food preparation worker, baker, pastry cook, and galley cook.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1106 - Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- HMT 1101 - Basic Culinary Skills
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2215 - Hospitality Cost Controls
- MAT 1120 - Business Mathematics


## Food Service Management, CRT

## Program Code: FSM.S.CRT • Credit Hours: 35

## Description

The Food Service Management certificate program combines classroom instruction and laboratory experience in food preparation and service for the restaurant and hotel/lodging industry.

## Career Opportunities

The Food Service Management certificate program is designed to provide the initial knowledge for a student to begin at a management trainee level within a corporate or franchise food service operation. With further training and experience, the student should be able to accept more responsibility at a store manager's level.

## Program Prerequisite(s)

- HMT 1107 - Sanitation \& Safety


## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- PSY 1100 - General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Food Truck and Street Foods, STC

## Program Code: FTSF.S.STC • Credit Hours: 15

## Description

Food Trucks and Street Foods have moved into the epicurean spot light in recent years and have moved from the fad stage into the newest and hottest food trend sweeping across America and beyond. In this shortterm certificate students will learn how to set-up and design a food truck operation as well as the requirements for food booths and mobile food stations.

## Career Opportunities

Street Food \& Food Trucks are ready-to-eat food or drink sold by a vendor, in a street or other public place, such as at a market or fair. It is often sold from a portable food booth, food cart, or food truck and meant for immediate consumption. Students will learn all the steps to creating a profitable operation of a street foods meals.

## Program Prerequisite(s)

- HMT 1101 - Basic Culinary Skills AND
- HMT 1107 - Sanitation \& Safety

Program Requirements

- HMT 1101 - Basic Culinary Skills
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1129 - Restaurant Desserts
- HMT 2203 - Street Foods \& Food Trucks


## General Aviation Maintenance, STC

Program Code: GAM.S.STC • Credit Hours: 23

## Description

The General Aviation Maintenance certificate provides foundational knowledge and skills required by the Federal Aviation Administration (FAA) for the Aviation Maintenance Technician (AMT) student. To become an AMT, two ratings are required, the Airframe (A) and the Powerplant (P); this is commonly referred to as an "A\&P Certificate". The GAM.S.STC, the Airframe Maintenance (AAM.S.CRT) and Powerplant Maintenance (PPAM.S.STC) certificates are needed to qualify the student to become an AMT. Students will learn to apply mathematics and physics, read and interpret aircraft drawings, conduct ground operations and servicing of aircraft, interpret maintenance publications, interpret FAA regulations, make correct and legal aircraft record entries, perform weight and balance calculations, understand basic electricity, understand makeup of materials used in aircraft
manufacture, understand aircraft fasteners, inspect welds, inspect for aircraft deterioration (corrosion) and understand and perform aircraft repair methods. Students will learn to apply the knowledge and skills they have learned with extensive hands-on training in the aviation maintenance lab. Sinclair is an FAA-approved Aviation Maintenance Technician School (AMTS) under Part 147.

## Career Opportunities

The Aviation industry is experiencing a pressing shortage of aviation mechanics. In its most recent pilot and technician outlook report, issued in 2020 , Boeing estimated that 739,000 new technicians would be needed worldwide during the next 20 years, much of it due to the large number of recent and upcoming retirements in the field...that includes 192,000 new technicians needed in North America.

## Program Requirements

- AVT 1113 - Drawings for Aviation
- AVT 1116 - Regulations for Maintenance
- AVT 1118 - Weight \& Balance
- AVT 1132 - Basic Aviation Electricity II
- AVT 1135 - Materials \& Processes
- AVT 1213 - Corrosion
- AVT 2143 - Review \& Recommendation
- AVT 2237 - Aircraft Inspections


## Geographic Information Systems, STC

## Program Code: GEOIS.S.STC • Credit Hours: 19

## Description

The Geographic Information Systems (GIS) short-term certificate will provide students with both theoretical and practical applications of GIS. The certificate will cover the foundational concepts in GIS, including the principles of cartography and GIS, database management and analysis, data acquisition, and manipulation of georeferencing and geocoding.

## Career Opportunities

Students completing the certificate will have the technical skill set in GIS required to perform a variety of entry level positions in a variety of arenas, including, regional and local government agencies, business and community organizations.

## Program Requirements

- CIS 2165 - Database Management
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1209 - Map Design \& Visualization
- GEO 2210 - Advanced Spatial Analysis
- MAT 1450 - Introductory Statistics

Program Code: GSTA.S.STC • Credit Hours: 22

## Description

The Geospatial Technology Analyst short-term certificate will provide students with both theoretical and practical applications of Geographic Information Systems (GIS). The certificate will cover the foundational concepts in GIS, database management and analysis, data acquisition, and manipulation of georeferencing and geocoding.

## Career Opportunities

This certificate is designed for those students who seek to enhance their job-related skills in becoming a GIS analyst. The U.S. Department of Labor Employment and Training Administration (DOLETA), for example, cites an annual growth rate of approximately 35 percent for the geospatial technology industry. Students completing the certificate will have the technical skill set in GIS required to perform a variety of entry level positions in a variety of arenas, including, regional and local government agencies, business, and community organizations.

## Program Requirements

- AVT 1120 - Electro-Optical \& Infrared Data Analysis OR
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II
- GEO 1215 - Introduction to Remotely Sensed Imagery OR
- EET 1121 - UAS Remote Sensing \& Analysis AND
- EET 1158 - Aerospace Spatial Visualization
- GEO 2210 - Advanced Spatial Analysis


## Geospatial Technology Programming Specialist, STC

## Program Code: GST.S.STC • Credit Hours: 20

## Description

Students learn advanced applications in geographical information system software, ArcGIS; C++ software programming skills; how to design and implement websites for internet delivery of data; design and administer relational databases; query databases using SQL.

## Career Opportunities

Graduates of this certificate will be able to build upon already existing programming skills to find employment in government and within private industry employing computer programmers with general GIS skills and knowledge such as: Database Developer or Software Applications Programmer. According to the Bureau of Labor and Statistics (www.bls.gov), "As a result of rapid employment growth over
the 2008 to 2018 decade, job prospects for computer software engineers should be excellent."

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 2210 - Advanced Spatial Analysis


## Global Studies, STC

## Program Code: GSC.S.STC • Credit Hours: 24-25

## Description

The Global Studies Certificate provides students seeking a multicultural credential an opportunity to earn a short-term certificate that is completely aligned with a variety of AA degrees. Sinclair students with the desire to acquire knowledge and analytical skills in political, social, historical, scientific, linguistic, economic and cultural aspects are well suited for pursuing this certificate.

## Career Opportunities

Designed for students who are planning on using Global Studies to enhance their careers in: global cultural industries in music, film, sports, and consumer life; global environmental management; global health; global marketing; human justice organizations; international governance; international humanitarian service; international development agencies; international business; mass communication; travel, tourism and international hospitality management; and United States government offices and agencies. The student who pursues this short-term technical certificate would plan to use this to supplement their professional development or to strengthen a major for which Global Studies is a strong base.

## Program Requirements

- SCC 1101 - First Year Experience
- SOC 1145 - Introduction to Cultural Anthropology
- GEO 1101 - Global Forces, Local Diversity OR
- GEO 1102 - Earth's Physical Environment OR
- GEO 1201 - World Regional Geography: People, Places \&


## Globalization

- Language Electives $\mathbf{8} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- HIS 1101 - United States History I OR
- HIS 1111 - Western Civilization I OR
- HIS 1112 - Western Civilization II OR
- HIS 2215 - Survey of African History OR
- HIS 2216 - Survey of Latin American History OR
- HIS 2217 - Survey of East Asian History OR
- HIS 2219 - Survey of the Middle East OR
- HUM 1125 - Introduction to the Humanities OR
- PHI 2205 - Introduction to Philosophy
- PLS 2200 - Political Life, Systems \& Issues OR
- PLS 2220 - International Relations OR
- PLS 2860 - Model UN/International Issues
- REL 1111 - Eastern Religions OR
- REL 1112 - Western Religions


## Greenhouse Technician, STC

## Program Code: GHT.S.STC • Credit Hours: 16

## Description

The Greenhouse Technician Certificate will equip students with basic knowledge of plant science that is used for the growth, development, and utilization of cultivated plants. This knowledge will allow the students to propagate plants, implement sustainable landscape design, understand the science of soil, and will ultimately enable the student to operate and manage a greenhouse.

## Career Opportunities

Graduates of the Greenhouse Technician Certificate program are employable as entry-level positions in the nursery, landscape, or agricultural industry. Instruction and practical application of learned skills provide a broad occupational background that appeals to prospective employers.

Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1205 - Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design


## Health Information Management Technician, CRT

Program Code: HIMT.S.CRT • Credit Hours: 30

## Description

The Health Information Management Technician certificate prepares students to work in a medical office setting. This certificate will focus on preparing students for an entry-level office position in a medical facility where basic electronic health record technology, medical terminology, medicolegal principles and revenue-cycle principles are utilized. A grade of " C " or higher is required in all courses to receive the certificate.

## Career Opportunities

Healthcare record scanners, record clerks, receptionists, medicolegal technicians, patient-registration clerks, long-term care HIM positions,
hospice HIM positions, insurance companies and healthcare facilities clerk.

## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1221 - Specialized Computer Applications for Health

Information Management

- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2233 - Healthcare Information Systems


## Histotechnology, CRT

## Program Code: HT.S.CRT • Credit Hours: 33

## Description

The one-year technical certificate program in Histotechnology (HT) prepares students to enter the workforce as Histology Technicians. In this profession, graduates will be specialized clinical laboratory professionals who work in a hospital laboratory setting processing patient tissue samples onto microscopic slides for pathologists to examine for diagnostic or research purposes. This certificate program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Student Information packet located on the webpage. Students will have a maximum of three opportunities to successfully complete all general education courses required by the program. All course withdrawals (W) or failures (D) or ( F ) will count as an attempt. After a third unsuccessful attempt, the student is no longer eligible to enter or continue in the program. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Note: Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Accreditation with the National Accrediting Agency for Clinical Laboratory Science (NAACLS) is currently in process.

## Career Opportunities

Histology Technicians have a unique combination of theoretical and technical skills that make them employable in a number of job environments including hospital laboratories, clinics, research laboratories, industry, sales, technical support, administration and education. Employment of clinical laboratory technologists and technicians is projected to grow 5 percent from 2022 to 2032, faster than the average for all occupations. About 24,000 openings for clinical laboratory technologists and technicians are projected each year, on
average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Clinical Laboratory Technologists and Technicians, at https://www.bls.gov/ooh/healthcare/clinical-laboratory-technologists-and-technicians.htm (visited September 14, 2023).

## Program Pre-requisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I AND Minimum GPA of >2.7 AND
Pass a criminal background check AND
Students cannot be color blind for this certificate AND Vaccines required for practicum


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- CHE 1111 - Introduction to Chemistry I
- CHE 1151 - Lab for Introduction to Chemistry I
- CLT 2710 - Histology Topics I
- CLT 2713 - Lab for Histology Topics I
- CLT 2720 - Histology Techniques
- CLT 2723 - Lab for Histology Techniques
- CLT 2730 - Special Staining in Histology
- CLT 2733 - Lab for Special Staining in Histology
- CLT 2810 - CLT Practicum
- CLT 2910 - Histology Topics II
- CLT 2990 - Histology Practicum


## Home Health Aide, STC

## Program Code: HCA.S.STC • Credit Hours: 7

## Description

The Home Health Aide certificate prepares students to perform the basic skills necessary to provide personal care services and activities to elderly, convalescent, or disabled persons in the home of patients or in a residential care facility. Students will be able to demonstrate basic nursing care and the skills required to promote health and healing for patient, as well as implement nursing care that decreases risks and follows safety procedures. Upon completion of ALH 1120 - Nurse Aide Training, students are eligible to sit for the State Test for Nurse Aide Training to become a State Tested Nurse Aide (STNA).

## Career Opportunities

Career opportunities for Home Health Aide include, but are not limited to, hospitals, home health care, long-term care and rehabilitation centers.

Program Requirements

- ALH 1120 - Nurse Aide Training
- ALH 1250 - Health Science Practicum


## Hospitality Leadership and Administration, CRT

Program Code: HLA.S.CRT • Credit Hours: 30

## Description

The Hospitality Leadership and Administration one-year certificate is designed for those desiring to become a supervisor in hospitality operations. This one year certificate will benefit those interested in hospitality supervision, the calculations of cost control, front of the house menu planning and dining, POS systems, and more. There will also be other opportunities to obtain additional certificates through the National Restaurant Associations Managed First program.

## Career Opportunities

This certificate provides career opportunities in the businesses of Hospitality Operations such all segments of food and restaurant industry, meeting \& event planning, and lodging operations.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.


## Hospitality Reception and Service Specialist, STC

## Program Code: HRSS.S.STC • Credit Hours: 2

## Description

This certificate prepares individuals to work in the luxury service environment, while mastering the importance of soft-skills and strategies to resolve some of the most difficult challenges involving high end hospitality clientele.

## Career Opportunities

Upon completing this credential, students will have gained the knowledge for entry level employment as a guest relations associate within an upscale hotel, matre d for a fine dining establishment, receptionist at an established travel firm, or sales associate for a convention bureau. Ultimately, this is the first step toward completing a Degree in Hospitality Management.

Program Requirements

- HMT 1105 - Introduction to the Hospitality \& Tourism Industry


## Human Resource Management, STC

## Program Code: HRMT.S.STC • Credit Hours: 18

## Description

This certificate provides the opportunity to develop and refine human resources skills. The curriculum covers laws and regulations related to employment, implications of decisions and their effect on business as well as employee motivation. Also addresses human resource applications in strategic human resource management, workforce planning and employment, human resource development, total compensation and rewards, employee and labor relations and risk management. Contemporary approach to human resource management using a diagnostic model of internal and external influences.

## Career Opportunities

Students completing this certificate will be qualified to apply for Human Resource Specialist positions, in some cases, or will be prepared to further their studies in the human resources area within a four-year institution.

## Program Requirements

- COM 2206 - Interpersonal Communication
- FIN 2450 - Personal Finance
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems


## HVAC Light Commercial \& Residential Service, CRT

Program Code: LCHS.S.CRT • Credit Hours: 31-33

## Description

This program is intended for entry-level students or residential service technicians desiring careers as light commercial HVAC service technicians. This program is a hands-on troubleshooting and service program geared to the light commercial HVAC industry including convenience stores, restaurants, strip malls and any other type of small business concern. Students learn the basics of heating, cooling,
distribution and control of these HVAC systems. The hands-on component uses the types of equipment installed in the field.

## Career Opportunities

Students find work as service technicians, control technicians, or performing installation work for commercial and residential contractors.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1601 - Building Electric \& Controls
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings
- HVA 1401 - HVAC Mechanical \& Electrical Troubleshooting
- MAT 1110 - Math for Technologists OR
- MAT 1200 - Technical Mathematics
- MET 1131 - Personal Computer Applications for Engineering Technology
- HVA 2700 - HVACR Engineering Technology Internship OR
- EGV 1251 - Introduction to Energy Management Principles OR
- EGV 1301 - Architectural Energy Analysis OR
- EGV 1401 - Weatherization \& Building Performance Training OR
- EGV 2351 - LEED Green Associate Exam Preparation OR
- CAT 1201 - Construction Methods \& Materials OR
- CAT 1401 - Construction Cost Estimating OR
- CAT 1741 - Residential Electrical Systems


## Industrial Internet of Things Technician, CRT

## Program Code: IIOT.S.CRT • Credit Hours: 33

## Description

This one-year certificate provides the knowledge and basic skills needed to work in the automation industry as an entry-level support technician for Industrial Internet of Things (IIoT). In addition to advanced manufacturing and logistics warehousing, a growing number of IoT devices are created for consumer use, including connected automotive vehicles, home automation devices, wearable technology, connected health, and appliances with remote monitoring capabilities. Students who complete this certificate learn IIoT fundamentals, automation computer hardware, software, data management, and networking. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and necessary technical skills.

## Career Opportunities

This certificate program will provide the entry level education and training necessary to operate, program, diagnose, and repair microcontroller based IIOT devices and PLC based IIOT industrial machines. Graduates will be qualified to work for original equipment/system
suppliers, consultants/third party support, as well as, equipment/system end users. All courses within certificate may be applied towards a degree in Internet of Things Cyber Technician, a high demand, high paying field.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"


## Industrial Maintenance Technician, STC

## Program Code: INDMT.S.STC • Credit Hours: 26-28

## Description

The Industrial Maintenance Technician certificate provides the knowledge and skill required for installing, maintaining and troubleshooting modern industrial machinery. Students will learn to solve practical maintenance problems, read and interpret mechanical drawings and interpret maintenance publications.

## Career Opportunities

This certificate will provide the necessary background to perform industrial maintenance operations on a wide range of electromechanical equipment.

## Program Requirements

- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM)

Systems

- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231 - Troubleshooting of Automated Systems
- MET 1301 - SolidWorks Basics OR
- CAM 1107 - Introduction to Mechanical Drafting with CAD

Industrial PLC Programming Technician, STC

Program Code: PLC.S.STC • Credit Hours: 8-10

## Description

This certificate provides students and working professionals the basic necessary knowledge and skills to operate, program, and diagnose Programmable Logic Controller (PLC) based control systems in advanced manufacturing automation process operations, Original Equipment Manufacturer (OEMs), and logistics/supply chain high-tech warehousing automation operations. This program covers digital fundamentals used in all of today's computers, PLC hardware, PLC ladder logic programming, PLC I/O wiring diagrams, PLC communication architecture, networking, HMIs (Human Machine Interface) in a hands-on learning environment on several different types of PLCs.

## Career Opportunities

Graduates will be qualified for entry level work as a PLC technician for original equipment/system suppliers, consultants/third party support, as well as, equipment/system end users. Manufacturing industries that require PLC Programming Technicians include food, pharmaceutical, defense, aerospace, chemical, plastics, steel, metals, paper, textiles, and automotive industries. Graduates typically work in manufacturing process support, maintenance support, engineering support, sales/service support, or consulting functions. All courses within certificate may be applied towards a degree in Automation \& Control Technology with Robotics, a high demand, high paying field.

## Program Requirements

- EET 1198 - Digital Technology OR
- EET 1131 - Digital Electronics
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers


## Industrial Robot Technician, CRT

## Program Code: IRT.S.CRT•Credit Hours: 30

## Description

This certificate provides the knowledge and skills required to meet the needs for technicians in industries that either provide robots systems for sale or use robots in their production facilities.

## Career Opportunities

This certificate program will provide the education and training necessary to operate, program, diagnose, and repair industrial robots. Graduates will be qualified to work for original equipment/ system suppliers as well as equipment/system end users.

## Program Requirements

- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231 - Troubleshooting of Automated Systems
- EGR 2250 - Electromechanical Repair
- EGR 2252 - Teach Pendant Robot Programming


## Industrial Robotics \& PLC Programming Technician, STC

## Program Code: IRPLC.S.STC • Credit Hours: 17-19

## Description

This certificate extends the knowledge and skills students learn in the Industrial PLC Programming Technician certificate by teaching students to operate, program, and troubleshoot robotic-cells and control systems used in advanced manufacturing operations, Original Equipment Manufacturer OEMs, logistics/supply chain centers, and automated warehousing operations. This program covers digital fundamentals common to today's computers, basics of automated systems, Robotic Teach Pendant Programming (TPP), Robotic Handling Tool fundamentals, Programmable Logic Controller (PLC) hardware, PLC ladder logic programming, PLC I/O wiring diagrams, PLC communication architecture, networking, Human Machine Interface (HMIs) in a "hands-on" learning environment setting.

## Career Opportunities

This certificate program will provide the education and training necessary to operate, program, diagnose, and repair PLC \& industrial robots. Graduates will be qualified to work for original equipment/system suppliers, consultants/third party support, as well as, manufacturing and supply/chain logistics warehousing equipment/system end users. All courses within certificate may be applied towards a degree in Automation \& Control with Robotics, a high demand, high paying field.

## Program Requirements

- EET 1198 - Digital Technology OR
- EET 1131 - Digital Electronics
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2231 - Troubleshooting of Automated Systems
- EGR 2252 - Teach Pendant Robot Programming


## Information Systems Security, STC

Program Code: ISSC.S.STC • Credit Hours: 18

## Description

This certificate will help prepare students and working professionals to perform effectively in the Information Assurance area of Information Technology. The courses required for this certificate have been
reviewed and validated by the NSA. Students completing the courses outlined here will receive the ISSC Certificate jointly issued by Sinclair Community College and the NSA. Because the specified content in these six courses has been approved, course credit earned by articulated or proficiency cannot be accepted.

## Career Opportunities

With the increased awareness of the need for computer and network security in government, industry and education, there are greatly increased opportunities for students prepared to work in Information Assurance. Students and working professionals completing this certificate will have significantly enhanced opportunities to pursue jobs in the Information Assurance arena within the Federal government, Department of Defense and/or private industry

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment OR
- CIS 2650 - Ethical Hacker
- CIS 2640 - Network Security


## International Business, STC

## Program Code: INTB.S.STC • Credit Hours: 18

## Description

This certificate allows students to explore content and experiences relevant to employment in multinational firms and Non-Governmental Organizations (NGOs). Students will learn technical information that is applicable to further study in international business as well as direct employment in organizations operating on a global basis.

## Career Opportunities

Students will have the opportunity to develop knowledge and relationships that lead to employment in multinational organizations. Students will have the foundational knowledge and business contacts to pursue internship and careers throughout the world, if they so choose.

## Program Requirements

- GEO 1201 - World Regional Geography: People, Places \&

Globalization

- MAN 1107 - Foundations of Business
- MAN 1110 - International Business
- MAN 2150 - Management \& Organizational Behavior
- SOC 1145 - Introduction to Cultural Anthropology
- Business Management Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Business Management Elective

- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2270 - Management Internship
- MAN 2279 - Business Management Capstone
- MRK 2100 - Foundations of Marketing
- MRK 2101 - Principles of Marketing Management
- MRK 2135 - Digital Marketing


## Internet of Things Technician, STC

## Program Code: IOTT.S.STC • Credit Hours: 19

## Description

This short term certificate offers knowledge and basic skills to work in the electronics/programming industry as an entry-level support technician for Internet of Things (IoT). In addition to advanced manufacturing, a growing portion of IoT devices are created for consumer use, including connected vehicles, home automation, wearable technology, connected health, and appliances with remote monitoring capabilities. Micro-controllers are the heart of any IoT device. Graduates learn micro-controller hardware, programming applications, networking, and security. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and necessary technical skills.

## Career Opportunities

This certificate program will provide the entry level education and training necessary to operate, program, diagnose, and repair microcontroller based Internet of Things (IoT) devices. Graduates will be qualified to work for original equipment/system suppliers, consultants/ third party support, as well as, equipment/system end users. This certificate is not only for individuals that are new to the field of IoT, but to those individuals that are already working in the field, and want to update their skill set. All courses within the certificate may be applied towards an Associate in Applied Science degree in Internet of Things Cyber Technician, a high demand, high paying field.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2640 - Network Security
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"


## IT Fundamentals, STC

## Program Code: ITFN.S.STC • Credit Hours: 18

## Description

This certificate provides the fundamental courses needed to prepare for any of the multiple Computer Information Systems (CIS) programs or
areas of specialization. It allows students to experience introductory courses in various disciplines as preparation for their chosen degree objective. All courses in this certificate apply to the various degree programs in the Computer Science and Information Technology Department.

## Career Opportunities

Entry level positions in various areas including user support, system administration and network management will be available to students completing this certificate. Many employers are quite willing to provide job specific training to employees already possessing the broad technical experiences in this certificate. Students completing this certificate and a specific CIS degree program will be further prepared for specific employment opportunities.

## Program Requirements

- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management


## Large Animal Care \& Handling, STC

## Program Code: LAC.S.STC • Credit Hours: 16

## Description

This program is designed to introduce the student to working within the agricultural field and will provide a baseline of business, communication, and animal handling knowledge.

## Career Opportunities

Holders of this certificate may be better able to obtain employment, or increase their status as a Farm Worker, Farm Manager, Feed Store Worker, Farm Bureau Representative, or Farm Banking Assistant.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business
- VET 1120 - Introduction to Large Animal Sciences: Handling \& Husbandry
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Law Enforcement, CRT

## Program Code: CJLES.S.CRT • Credit Hours: 33

## Description

This certificate prepares the learner for future training and education in the field of law enforcement. The certificate enhances law enforcement professional skills and knowledge. It may assist the student in performing well in future civil service examinations for employment or promotion. All courses in this certificate apply toward the Associate of Applied Science degree in Law Enforcement, if desired.

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice/law enforcement including those in court systems, court administration, patrol, victim services, investigation, and probation/parole.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology


## Law Enforcement, STC

Program Code: CJLE.S.STC • Credit Hours: 21

## Description

This certificate prepares students for future training and education in the field of law enforcement. This certificate enhances law enforcement professional skills and knowledge. It may assist the student in performing well in future civil service examinations for employment or promotion.

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice and law enforcement including those in court systems, court administration, law enforcement agencies, private investigation agencies, and probation and parole.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1105 - Criminal Law
- CJS 1125 - Policing
- CJS 2111 - Ethics \& Professionalism in Criminal Justice


## Legal Nurse Consultant, CRT

## Program Code: LNC.S.CRT • Credit Hours: 33

## Description

The Legal Studies program educates students with practical assignments in a "simulated law office" environment. All student work demonstrates the professional, ethical, and technology concepts they will use in the legal field. All full-time faculty are licensed attorneys. The objective of the Legal Nurse Consultant Certificate is to prepare the registered nurse to perform legal analysis of health care issues as well as prepare them for litigation preparation on medical malpractice and personal injury cases. Building on the nurse's education and clinical experience, the program will provide the practical skills and legal knowledge necessary to function in the legal arena. Additionally, instructors will ensure that nurses who take the program understand the role of the Legal Nurse Consultant in the greater community and what is involved in working as a consultant. This certificate is intended to enhance the attractiveness of an already obtained Nursing degree by providing students with practical skills needed to work in the legal field. All students are required to complete an attorney-supervised internship for hands-on experience using their practical skills. A grade of " C " or higher is required in all courses to remain in the program. Established in 1978, the Sinclair Legal Studies Program was the first paralegal program in the area, and the first in the area to be approved by the American Bar Association. Sinclair Legal Studies graduates hold a degree from an ABA-Approved program at a fully-accredited Ohio college. Students must take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Career Opportunities

LNCs combine nursing expertise with legal knowledge to advise attorneys, and others, on matters involving medical malpractice, personal injury, product liability, workers' compensation, healthcare licensure investigations, and other healthcare related cases. Legal Nurse Consultants can find themselves in positions where they: review and analyze medical records, screen for record tampering, interview clients, conduct research and summarize medical literature, evaluate liabilities and damages, assist with discovery and depositions, prepare exhibits and render informed opinions to attorneys on the delivery of health care and its outcomes for specific cases, assist in the selection of expert witnesses as needed, and serve as expert witnesses in cases involving nursing standards of care or related matters.

## Program Requirements

- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2401 - Legal Studies Internship
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- BIS 1221 - Specialized Computer Applications for Health Information Management
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- Legal Studies Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Legal Studies Electives

- CJS 1105 - Criminal Law
- LAW 1101 - Business Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- MHT 1101 - Introduction to Mental Health Services
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2511 - Online Legal Research
- RES 1201 - Real Estate Law


## Legal Studies Post Baccalaureate Certificate, CRT

## Program Code: PAR.S.CRT • Credit Hours: 34

## Description

The Legal Studies Program educates students with practical assignments in a "simulated law office" environment. All student work demonstrates the professional, ethical, and technology concepts they will use in the legal field. All full-time faculty are licensed attorneys. Student learning is supported by experienced paralegals who serve as team teachers. This certificate is intended to enhance the attractiveness of an already obtained bachelor's degree by providing students with practical skills needed to work in the legal field. All paralegal students are required to complete an attorney-supervised internship for hands-on experience using their paralegal skills. A grade of " C " or higher is required in all courses to remain in the program. Established in 1978, the Sinclair Paralegal Program was the first paralegal program in the area, and the first in the area to be approved by the American Bar Association. Sinclair paralegal graduates hold a degree from an ABAApproved program at a fully-accredited Ohio college. Students must take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Career Opportunities

Sinclair led the way with the first paralegal program in the Miami Valley in 1978, and it became the first to earn approval from the American Bar Association. Nearly a thousand graduates of Sinclair's Legal Studies Program now work in large and small law firms, the business world, courts, and government agencies. Under the supervision of a lawyer, a professional paralegal may perform such interesting duties as investigating cases, interviewing clients and witnesses, preparing legal documents, and legal research. These responsibilities are carried out in a variety of legal fields, such as
criminal law, probate, family law, litigation, and real estate. Employment opportunity reports for program graduates are encouraging. Completion of the Legal Studies Program does not authorize a graduate to practice law as an attorney, or to give legal advice.

## Program Prerequisite(s)

- Approval of Department AND
- Students must have obtained a bachelor's degree with a GPA of 2.0
or higher from an accredited institution to be eligible to pursue this certificate.


## Program Requirements

- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2401 - Legal Studies Internship
- RES 1201 - Real Estate Law
- Legal Studies Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Legal Studies Electives

- CJS 1105 - Criminal Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- PAR 2507 - Legal Interviewing Skills
- PAR 2511 - Online Legal Research


## Linux Security \& Network Essentials, STC

## Program Code: LSNE.S.STC•Credit Hours: 12

## Description

This certificate is an information technology certificate concentrating on teaching specific skills pertaining to the fundamentals of the Linux operating system, Linux security and network and data communications.

## Career Opportunities

Opportunities include Linux administrators and Linux consultants.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2550 - Linux Operating System
- CIS 2640 - Network Security


## Magnetic Resonance Imaging, STC

## Program Code: MRI.S.STC • Credit Hours: 5

## Description

The short term certificate in Magnetic Resonance Imaging (MRI) is designed to provide radiographers certified by the American Registry of Radiologic Technologists (ARRT) with didactic and clinical education in Magnetic Resonance Imaging. Didactic courses focus on current MRI principles while clinical courses provide students with real-life experience and development of hands-on skills needed to pursue employment opportunities MRI.

## Career Opportunities

Completion of this short term certificate program can lead to employment in comprehensive hospitals, suburban or rural outpatient centers, surgery centers, etc. as a Magnetic Resonance Imaging Technologist.

## Program Prerequisite(s)

Approval of Department

Program Requirements

- RAT 2643 - Principles of Magnetic Resonance Imaging
- RAT 2645 - Magnetic Resonance Imaging Practicum
- RAT 2645 - Magnetic Resonance Imaging Practicum


## Mammography, STC

Program Code: MAMMO.S.STC • Credit Hours: 4-6

## Description

The short term certificate in Mammography is designed to provide radiographers certified by the American Registry of Radiologic Technologists (ARRT) with didactic and clinical education in Mammography. Didactic courses focus on current Mammography principles while clinical courses provide students with real-life experience and development of hands-on skills needed to pursue employment opportunities Mammography.

## Career Opportunities

Completion of this short term certificate program can lead to employment in comprehensive hospitals, suburban or rural outpatient centers, etc. as a Mammographer.

## Program Prerequisite(s)

Approval of Department

## Program Requirements

- RAT 2647 - Principles of Mammography
- RAT 2649 - Mammography Practicum


## Manufacturing Management, STC

## Program Code: MM.S.STC • Credit Hours: 18

## Description

This short-term certificate provides a manufacturing specific background in organizations, industrial supervision, improvement techniques, quality, teamwork and cost analysis.

## Career Opportunities

The purpose of this certificate is to assist individuals in their transition from a technical job (engineer, technician, production worker, etc.) to a managerial position (foreman, supervisor, manager, etc.) in the manufacturing industry.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1130 - Lean Operations \& Continuous Improvement
- MAN 2110 - Introduction to Project Management


## Mechanical Drafter, CRT

## Program Code: MEDRAFT.S.CRT•Credit Hours: 34-35

## Description

The Mechanical Drafter certificate familiarizes students to the basics of the industrial design process, industry terminology, general practices, and latest versions of computer-aided drafting software. All courses are part of the Mechanical Engineering Technology associate degree.

## Career Opportunities

Professionals with basic mechanical engineering and software design skills are in demand by mechanical design firms.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MAN 2110 - Introduction to Project Management OR
- MET 1151 - Guitar Manufacturing using Science, Technology,

Engineering, \& Mathematics (STEM) Concepts OR

- MET 2700 - Mechanical Engineering Technology Internship OR
- PHY 1141 - College Physics I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 2281 - Engineering Technology Professional Practice
- MET 1301 - SolidWorks Basics
- OT36 Social and Behavioral Sciences Elective 3 Cr. Hr(s).


## Mechanical Software Technician, STC

## Program Code: METECH.S.STC • Credit Hours: 16

## Description

The Mechanical Software Technician short term certificate introduces students to the field of mechanical engineering including using the latest versions of computer-aided drafting software. All courses are part of the Mechanical Engineering Technology associate degree.

## Career Opportunities

Professionals with software skills are in demand by mechanical design firms.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 2281 - Engineering Technology Professional Practice
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MET 1151 - Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts OR
- MET 2700 - Mechanical Engineering Technology Internship


## Mechanical Technician,STC

Program Code: MECHTECH.S.STC • Credit Hours: 20-22

## Description

This program will provide the hands-on skills in mechanical engineering technology and manufacturing to begin entry-level technician jobs, with options open in numerous fields and companies.

## Career Opportunities

The Mechanical Technician certificate introduces students to basic mechanical engineering concepts and prepares them to work as entrylevel technicians in mechanical engineering or related fields.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- EET 1120 - Introduction to DC \& AC Circuits
- EGR 1106 - Basic Mechanical \& Electrical Skills
- MET 1111 - Preparatory Math for Engineering Technology
- MET 2151 - Material Science
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics AND
- MET 1401 - Additive Design \& Printing OR
- MET 2281 - Engineering Technology Professional Practice OR
- MET 2700 - Mechanical Engineering Technology Internship OR
- MET 1151 - Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts


## Medical Assistant, CRT

## Program Code: MAS.S.CRT • Credit Hours: 37

## Description

Medical assistants are multi-skilled professionals who assist physicians with the administrative and clinical aspects of patient care. This certificate is designed to be completed in three (3) semesters on a fulltime basis. The certificate consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all certificate courses. The student will be required to complete 210 hours of unpaid supervised practicum during their third semester of the certificate. Note: Healthcare Professional CPR, health certificate, immunizations, student health insurance, and background check must be completed prior to enrolling in the practicum component of the curriculum. The graduate is eligible to sit for a national exam to become a credentialed medical assistant.

## Accreditation

Sinclair Community College's Medical Assistant certificate program is accredited the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).
Commission on Accreditation of Allied Health Education Programs, 9355 113th Street N., \#7709, Seminole, FL 33775.

## Career Opportunities

Currently medical assisting is one of the fastest growing occupations in the United States with an expected increase in potential jobs by as much as $23 \%$ through 2028 (US Bureau of Labor Statistics, Sept. 4, 2019). Options for individuals seeking medical services and treatment: urgent care, surgicare and ambulatory care centers, as well as health
maintenance organizations (HMO's), multi-physician group practices and medical specialty clinics have opened new career opportunities.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes
- ALH 2201 - Survey of Drug Therapy
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1102 - Clinical Medical Assisting I
- MAS 1192 - Lab for MAS 1102
- MAS 1103 - Clinical Medical Assisting II
- MAS 1193 - Lab for MAS 1103
- MAS 1110 - Administrative Medical Assisting
- MAS 2201 - Clinical Medical Assisting III
- MAS 2291 - Lab for MAS 2201
- MAS 2210 - Medical Billing Specialist
- MAS 2220 - MAS Practicum


## Medical Coding \& Billing Specialist, STC

## Program Code: MCBS.S.STC • Credit Hours: 24

## Description

This certificate prepares students for entry-level coding and billing positions in physician medical offices, medical insurance companies and outpatient billing services. Students will develop skills to accurately determine diagnostic and procedural code number assignments that impact medical reimbursement. Skill sets include application of ICD-10-CM, CPT and HCPCS coding systems; medical terminology; anatomy and physiology and disease processes; processing insurance claims and reimbursement practices. The Medical Billing and Coding Specialist certificate can be completed in the traditional classroom setting or completely online or a combination of both delivery systems. Students must receive a grade of C or higher in all courses in the MCBS.STC and have a GPA of 2.0 to receive the certificate.

## Career Opportunities

Employment prospects for medical coding and billing specialists are excellent throughout the nation. Career opportunities include: physician medical offices, medical insurance companies and outpatient billing services.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- HIM 1101 - Medical Terminology
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 2262 - Advanced Medical Office Coding
- MAS 2210 - Medical Billing Specialist


## Micro-Electronics Technician, STC

## Program Code: MICRO.S.STC • Credit Hours 18

## Description

Course work is designed to rapidly prepare the student for the microelectronics workforce. Micro-electronics includes the exciting areas of digital electronics and integrated circuit (IC) chips that control everything from consumer devices, automobiles, medical devices, appliances, sensors, aerospace, industrial controls, and state-of-the-art internet of things (IoT) technology. Technicians will be prepared to enter integrated circuit fabrication and design workforce.

## Career Opportunities

Chip Fabrication technician, micro-controller programming technician, digital electronics technician, technical support technician, field support technician, consultant.

## Program Requirements

- EET 1116 - Electronics Schematics \& Fabrication
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EGR 2205 - Integrated Circuit (IC) Fabrication Techniques
- MAT 1110 - Math for Technologists
- PHY 1106 - Physics for Technology


## Microsoft Certified Solutions Associate, STC

## Program Code: MCSA.S.STC • Credit Hours: 18

## Description

This certificate and the associated courses will help students prepare for the certification exams needed to earn the designation of Microsoft Certified Solutions Associate (MCSA). This credential and the technical competence, as demonstrated by the certification exams, will help students earn employment in the areas of Network Management, Network Administration and System Administration.

## Career Opportunities

Students completing this short term certificate will be prepared for vendor and/or industry certification exams that are highly desired and valued in the Information Technology field. In turn, these certifications will help prepare students for careers in Network Administration, Network Management, System Administration and other aspects of computer and network management.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2640 - Network Security


## Network Engineering Associate, STC

## Program Code: NEA.S.STC • Credit Hours: 17

## Description

This certificate program will provide the student with state-of-the-art networking skills taught via the Cisco Networking Academy curriculum. The curriculum includes all aspects for an introductory network engineering position. This program is designed to provide the knowledge and skills required to understand and participate in basic networking design, installation, configuration and troubleshooting corporate network infrastructure. Included in this program are networking theory, Open Systems Interconnection (OSI) model, networking media, physical and logical design, maintaining networking equipment, designing and implementing internet protocol schemas, the basics of all current internal routing protocols, beginning security information and safety.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as network security analyst, network architect and network engineer.

## Program Prerequisite(s)

- CIS 1107 - Introduction to Operating Systems


## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2416 - Routing \& Switching Essentials
- CIS 2421 - Scaling Networks
- CIS 2640 - Network Security


## Network Engineering Entry Level, STC

## Program Code: NEEA.S.STC • Credit Hours: 10

## Description

This certificate program will provide the student with networking skills taught via the Cisco Networking Academy curriculum. The Cisco Certified Entry Level Networking Technician (CCENT) designation validates the ability to install, operate and troubleshoot a small enterprise branch network including basic network security. With the CCENT, a networking professional demonstrates the skills required for entry level network support positions. The curriculum covers networking fundamentals, wide area network (WAN) technologies, basic security and wireless concepts, routing and switching
fundamentals and configuring simple networks. The CCENT is the first step towards achieving the CCNA designation.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2416 - Routing \& Switching Essentials

Network Engineering Security Associate, STC

## Program Code: NESA.S.STC • Credit Hours: 16

## Description

This certificate will provide the student with state of the art network security skills taught using the Cisco Networking Academy curriculum. This program is designed to provide the knowledge and skills required to understand basic security threats and to configure and manage Cisco devices to provide appropriate network security. Cisco switches, routers, firewalls and Intrusion Prevention Systems (IPS) methods will be used.

## Career Opportunities

Security analysts plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. They may ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. They may also be involved in the response to computer security breaches and viruses.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2418 - Basic Firewall Security
- CIS 2416 - Routing \& Switching Essentials
- CIS 2640 - Network Security


## New Media, STC

## Program Code: NWMED.S.STC • Credit Hours: 17

## Description

The New Media Short-Term Certificate is designed to cultivate skills in mass communication and message design, visual communication, journalism and marketing within the realm of new technologies including blogs, podcasts, video games, video production, websites, and social media platforms such as Facebook, Instagram, YouTube and Twitter. Students will learn valuable marketing skills, hands on visual communication design, and effective message design in mass communication channels through interdisciplinary theory and methodology. Graduates of the certificate will be able to analyze and assess the needs of a client in order to most effectively communicate and engage with their respective publics.

The New Media Certificate is built to add to the experience of students new to fields of marketing, communication, visual communication and journalism but is also beneficial to those that are currently working in the field and want to update their skill set to include new media techniques.

## Program Requirements

- COM 2201 - Introduction to Mass Communication
- COM 2270 - Communication Internship
- ENG 1101 - English Composition I
- JOU 2101 - Introduction to Journalism
- MRK 2135 - Digital Marketing
- VIS 1140 - Design Processes I


## Nurse Aide, STC

## Program Code: NAST.S.STC • Credit Hours: 4

## Description

Provides education to individuals in the basic skills necessary to provide personal care services and activities under the delegation and supervision of a registered or licensed practical nurse to residents in a long-term care facility.

Chapter 3701-19 of the OAC for the State of Ohio establishes the requirements for Ohio's Nurse Aide Training and Competency Evaluation program. These requirements mandate all NAs working on a regular basis in Ohio's LTCFs must complete an Ohio Department of Health-approved 75-hour TCEP and pass a competency evaluation test conducted by the director.

## Career Opportunities

Individuals may work as Nurse Aides; Home Health Care Aides or Patient Care Assistants.

Program Requirements

- ALH 1120 - Nurse Aide Training


## Nutrition Associate, STC

## Program Code: NA.S.STC • Credit Hours: 4

## Description

Graduates of the certificate program create environments where moments of joy, independence, and wellness are promoted as they assist with preparation of food items and serves food to patients and residents within a scheduled time frame. The Nutrition Associate cleans and maintains food service areas, including kitchen and dining room, assists the Nutrition Director or Dietary Manager and/or cook in maintaining inventory and quality control. Maintains clean, neat and safe work environment. Assures that residents diets are followed. Maintains current sanitation audits and highest standards for kitchen
cleanliness. Assists as a patient or resident assistant when all dietary duties are finished

## Career Opportunities

Career opportunities are abundant in both the Premier and Kettering Health hospital network organizations as well as area long-term care facilities. Nutrition Associates may also pursue employment opportunities in the public school system and correctional facilities.

## Program Requirements

- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems


## Ohio Peace Officer Basic Training Academy Professional, CRT

## Program Code: BPA.S.CRT • Credit Hours: 32

## Description

This program provides the Ohio Peace Officer training required by the State of Ohio for new Ohio law enforcement officers. Additionally, this program is designed specifically for cadets who wish to pursue a career in law enforcement, and the training provided enhances one's ability to successfully receive a certificate of completion from the State of Ohio. This program is the foundation for graduates to further their educational pursuits and is limited to those persons who are officially enrolled in the Sinclair Community College basic training academy. Graduates of this program shall receive certificates of completion from the Ohio Attorney General's office indicating they have completed basic training and are certified to become commissioned law enforcement officers for Ohio agencies.

## Career Opportunities

Local and state law enforcement agencies as well as private investigation and personal protection agencies.

## Program Prerequisite(s)

Physical fitness assessment, fingerprint check, oral interview and college level ready for English.

## Program Requirements

- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II
- ENG 1101 - English Composition I
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology


## Ohio Peace Officer Basic Training Academy, STC

Program Code: BAS.S.STC • Credit Hours: 26

## Description

This program of study will provide you with the complete Ohio Peace Officer basic officer training required by the State of Ohio for new Ohio law enforcement officers. Taught by state-certified commanders and instructors, the basic academy adheres to the required content, instructional and training standards necessary for individuals to become certified peace officers in the State of Ohio. The basic academy consists of over 700 hours of instruction delivered in 24 weeks of training. The curriculum is intensive and participants must devote significant time and effort to complete the program. Academic, physical fitness, firearms and other demanding skill sets are included in the program. At the conclusion of the training, students are required to take a 200-question written final exam administered by the Attorney General's Office to receive a certificate of completion. Graduates of this program typically seek employment as police officers, sheriff 's deputies, park rangers or other positions in Ohio which require a law enforcement commission. The Sinclair Academy has placed hundreds of graduates in more than 300 law enforcement agencies in Ohio. Entrance into Sinclair's Criminal Justice Training Academy is a competitive process and not all applicants are accepted. The academy is offered in both the Spring and Summer semesters.

## Career Opportunities

There are openings in local and state law enforcement agencies as well as private investigation and personal protection agencies.

## Program Prerequisite(s)

Physical fitness assessment, fingerprint check, oral interview and college level ready for English.

Program Requirements

- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II

Ohio Real Estate Sales Associate, STC
Program Code: RESS.S.STC • Credit Hours: 9

## Description

This certificate program is designed for the person who is interested in a career in real estate sales. The course work meets the educational requirement of 120 classroom hours for persons to sit for the Ohio real estate license exam: 40 hours of Real Estate Principles and Practices, 40 hours of Real Estate Law, 20 hours of Real Estate Finance, and 20 hours of Real Estate Appraisal. (Further state requirements must also be satisfied). Seat hour requirements of 120 hours are strictly enforced by state rule. Successful completers will receive the Ohio Real Estate Sales Associate Certificate.

## Career Opportunities

The U.S. Bureau of Labor Statistics says "Employment of real estate brokers and sales agents is projected to grow 11 percent from 2012 to 2022, about as fast as the average for all occupations" (Occupational Outlook Handbook).

Program Requirements

- RES 1101 - Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal


## Paramedic, CRT

## Program Code: EPST.S.CRT • Credit Hours: 33-34

## Description

Paramedics are essential members of the health care team who provide time-sensitive care to patients. These individuals take the emergency department to people's homes, to highways and to other remote locations. Paramedics bring life-saving equipment and knowledge to bear in an effort to reduce patient's suffering and to save lives. Students will use lecture, laboratory and real-world exposure to emergencies to learn the skills needed to care for the sick and injured in the out-ofhospital environment. The program is offered to provide students with variability and flexibility in scheduling. For more information, contact the EMS department at 937-512-5338 for an entrance application packet.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidates state licensures/certifications.

## Program Prerequisite(s)

- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I with a grade of C or better AND
- Approval of Department AND
- Valid State of Ohio EMT Certification


## Program Requirements

- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for

Emergency Medical Services Provider

- EMS 2105 - Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175 - Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical


## Patient Access \& Scheduling Coordinator, STC

## Program Code: MOR.S.STC • Credit Hours: 14

## Description

This certificate prepares students for entry-level employment in the medical office environment performing scheduling, monitoring patient appointments, out-patient procedures, medical and office equipment maintenance, storing supplies and pharmaceuticals. The program is designed to develop knowledge and understanding of medical language and documentation.

## Career Opportunities

Options for those who complete the certificate include: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMOs), multi-physician group practices and medical specialty clinics.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAS 1110 - Administrative Medical Assisting


## Patient Care Technician, STC

## Program Code: PCT.S.STC • Credit Hours: 7

## Description

The Patient Care Technician certificate prepares students to perform the basic skills necessary to provide personal care services and activities under the delegation and supervision of a registered or licensed practical nurse to patients within an acute care facility. Students will be able to demonstrate basic nursing care and the skills required to promote health and healing for patient, as well as implement nursing care that decreases risks and follows safety procedures. Upon completion of ALH 1120 - Nurse Aide Training, students are eligible to sit for the State Test for Nurse Aide Training to become a State Tested Nurse Aide (STNA).

## Career Opportunities

Hospitals; Home Health Aide; Long-term Care Facilities; Rehabilitation Centers.

## Program Requirements

- ALH 1120 - Nurse Aide Training
- ALH 1121 - Acute Care Nurse Aide


## Perioperative Nursing, STC

## Program Code: ORN.S.STC • Credit Hours: 4

## Description

This is an advanced certificate program designed to provide Registered Nurses (RN's), graduate nurses, and nursing students, an introduction to and experiential learning opportunities in perioperative nursing. Students will be exposed to the knowledge and skills required to provide safe, patient-centered care to patients having surgical intervention during the preoperative, intraoperative, and postoperative periods. Upon completion, students will be prepared for an entry-level operating room staff nurse position. Graduates are also eligible to join the Association of PeriOperative Nurses (AORN), and, following two years of operating room experience, may sit for the CNOR exam, an accredited credentialing exam for perioperative registered nurses.

## Career Opportunities

Upon completion, students will be prepared for an entry-level operating room staff nurse position. Graduates are also eligible to join the Association of PeriOperative Nurses (AORN), and, following two years of operating room experience, may sit for the CNOR exam, an accredited credentialing exam for perioperative registered nurses.

## Program Requirements

- SUT 2600 - Fundamentals of Perioperative Nursing


## Pharmacy Technician, STC

## Program Code: PHT.S.STC • Credit Hours: 21-23

## Description

This program prepares individuals to perform the technical and specialized skills of a pharmacy technician within retail, mail-order, hospital, nursing homes and home health care settings. The program is designed to develop knowledge and understanding of basic pharmacology, maintenance of patient records, drug-product preparation and distribution and record-keeping. A portion of this program will involve 80 hours of simulated lab and 210 hours of directed practice within a pharmacy. A state and federal background check will be required prior to starting the directed practice. A grade of " C " or better is required in all courses to complete the program. Upon completion of the program students may take the national Pharmacy Technician Certification Board Examination.

The Pharmacy Technician Program is accredited by the American Society of Health-System Pharmacists/Accreditation Council for Pharmacy Education (ASHP/ACPE).

## Career Opportunities

Pharmacy Technician in retail and mail-order settings, hospital pharmacies, nursing homes and home health care sites.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1122 - Pharmacy Technician I
- ALH 1123 - Pharmacy Technician II
- ALH 1124 - Pharmacy Technician Directed Practice
- ALH 1183 - Pharmacy Technician Lab
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1445 - Quantitative Reasoning OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Polysomnography, CRT

## Program Code: PSG.S.CRT • Credit Hours: 35-36

## Description

A Polysomnographic Technologist performs overnight, daytime, or home sleep studies, polysomnograms, on people with suspected sleep disorders. They work under the general supervision of a physician or designee. The polysomnographic technologist responsibilities include, but not limited to recording and analyzing related data and report their technical findings to the physician to aid in rendering a medical decision. The foundation principles of the Polysomnography certificate are geared toward the specialties of sleep, medicine, respiratory, neurology and behavioral sciences. The program includes a non-paid, supervised practicum to provide students the "hands-on" clinical experience at an SCC affiliated healthcare facility. Requires Professional Healthcare CPR; background check; immunizations prior to END 1891 - Polysomnography Practicum.

## Accreditation

Sinclair Community College's Polysomnography Certificate is accredited by the Commission on Accreditation of Allied Health Education Program (CAAHEP: https://www.caahep.org/Home.aspx). The Committee on Accreditation for Education in Polysomnographic Technologist Education (CoA-PSG) and CAAHEP's Board of Directors recognized the program's substantial compliance with the nationally established accreditation standards. Commission on Accreditation of Allied Health Education Programs, 9355 113th St. N, \#7709 Seminole, FL 33775 Phone: 727-210-2350 Fax: 727-210-2354

## Career Opportunities

Kettering Health Network, Premier and Dayton Children's hospital have all expressed the need for RPSGT prepared individuals. Average salary per year for a Polysomnographic Technician in Ohio is $\$ 55,310$ as of October 30, 2019, but the range typically falls between $\$ 49,730$ and $\$ 61,437$. Polysomnographic Technician Salary in Ohio | Salary.com

Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- END 1421 - Intermediate Polysomnography
- END 1425 - Lab for Intermediate Polysomnography
- END 1430 - Advanced Polysomnography
- END 1435 - Lab for Advanced Polysomnography
- END 1801 - Seminar for Polysomnography Practicum
- END 1891 - Polysomnography Practicum
- END 2550 - Fundamentals of Polysomnography
- END 2585 - Lab for Polysomnography
- END 2460 - Neurophysiology of Electroencephalography/Sleep Disorders
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics

Post Associate Certificate for Engineering University Transfer, STC

## Program Code: EUTPG.S.STC • Credit Hours: 16

## Description

The Post Associate Certificate for Engineering University Transfer is designed for students who would like to take additional coursework at Sinclair in preparation to transfer to a four-year university. A minimum of an associate degree is required. Courses used to fulfill the requirements of the AS degree in Engineering University Transfer cannot be used for this certificate. All students should meet with an academic advisor prior to enrolling in any courses within this certificate.

## Career Opportunities

This certificate is design to help students complete bridge courses before transferring to a four-year university.

## Transferability

All courses within the certificate have been selected for transfer to fouryear institutions.

- Students must have completed the Engineering University Transfer associate degree.


## Program Requirements

- Associate of Science Elective $16 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.


## Program Requirements

Choose 16 hours from:

- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155 - AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2131 - Engineering Digital Design
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1201 - English Composition II
- HIS 1112 - Western Civilization II
- ISE 1100 - Product Development Fundamentals
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- MAT 1450 - Introductory Statistics
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- MAT 2320 - Linear Algebra
- MAT 2330 - Differential Equations \& Linear Algebra
- MAT 2570 - Discrete Mathematics
- MAT 2600 - Applied Statistics
- MEE 2101 - Statics for Engineers
- MEE 2201 - Thermodynamics for Engineers
- MEE 2301 - Strength of Materials for Engineers
- MEE 2401 - Dynamics for Engineers
- MET 1161 - Software Tools for Engineering Technology
- MET 2101 - Thermodynamics
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics
- PHI 2205 - Introduction to Philosophy
- PHI 2206 - Introduction to Ethics
- PHY 2210 - MATLAB for Scientists \& Engineers
- REL 1111 - Eastern Religions
- REL 1112 - Western Religions


## Post Associate Certificate in Interior Design, STC

## Program Code: INDPG.S.STC • Credit Hours: 11

## Description

## Prerequisites

The certificate will provide an introduction to REVIT, construction drawings, materials and application; and kitchen and bath designs to support additional academic requirements to gain eligibility to take the National Council for Interior Design Qualification (NCIDQ) exam.

## Career Opportunities

Students will gain professional status to pursue careers as designers or consultants in design studios, architecture firms or commercial retailers.

## Program Prerequisite(s)

## Minimum of an AAS degree in interior design

## Program Requirements

- CAT 1121 - Architectural Graphics II
- CAT 2741 - Current Topics in Architecture
- IND 2250 -3D Modeling
- IND 2280 - Kitchen \& Bath Design


## Powerplant Aviation Maintenance, STC

## Program Code: PPAM.S.STC • Credit Hours: 19

## Description

The Powerplant Aviation Maintenance certificate provides the knowledge and skills required by the Federal Aviation Administration (FAA) for the powerplant maintenance technician student. Students will learn to apply all the knowledge and skills in the lab portion.

## Career Opportunities

Boeing Commercial Aircraft Company recently predicted 1,000,000 more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next 15-20 years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1128 - Powerplant Safety Systems
- AVT 2122 - Ignition \& Starting
- AVT 2126 - Reciprocating Engines
- AVT 2129 - Propellers
- AVT 2138 - Engine Fuel \& Fuel Metering
- AVT 2219 - Turbine Engines


## Pre-Actuarial Science, CRT

Program Code: ACTU.S.CRT•Credit Hours: 30

## Description

Students will complete all first and second-year technical courses required for bachelor's programs in Actuarial Science. This coursework is aligned with the recommendations of the Society of Actuaries (SOA) for students preparing to take the SOA professional qualifying exams. See soa.org for more information.

## Career Opportunities

Actuaries work for insurance companies and other financial institutions that use mathematical models to quantify expected gains and losses in selling consumer financial products and in making investments. Students who complete this certificate program will be well on their way to pursuing career opportunities as actuaries, financial advisers, or statistical consultants.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting OR
- CIS 1111 - Introduction to Problem Solving \& Computer Programming OR
- MAT 2600 - Applied Statistics
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2320 - Linear Algebra


## Processes for Interior Design, STC

## Program Code: IND.S.STC • Credit Hours: 24

## Description

This certificate provides students with an introduction in the field of interior design. It will include the following introduction to the design process: problem solving techniques, space planning, production selection, ADA compliancy, ergonomics, lighting, color, furniture placement and accessorizing, scaled floor plan, elevation and detail drawings, defining/applying architectural and interior-related materials, estimating/budgeting products, writing specifications; and, presentation skills.

## Career Opportunities

This certificate can provide students an opportunity to support entry level interior design positions. Many opportunities exist in retail stores (paint, flooring, lighting, and furniture), home staging, visual merchandising and as an interior designer's assistant.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2130 - Non-Residential Design
- IND 2140 - Sustainable Design


## Professional Communication, STC

## Program Code: COM.S.STC • Credit Hours: 27

## Description

Communication skills are critically important for everyone. Earning a professional communication certificate can be an important key to career success. Completion of the certificate will demonstrate to current and prospective employers that a student recognizes the importance of various communication skills and strategies in a variety of professional settings. The results of a 2011 survey by the National Association of Colleges and Employers showed verbal communication skills as the number one soft skill that employers sought in new college graduates looking to join their organizations.

## Career Opportunities

A Professional Communication Certificate can provide opportunities in journalism, speech education, business, industry, government, broadcast media, law, ministry, social services, public relations, or provide valuable communication skills to enrich any career. Enhancing communication skills provides invaluable benefits for all students, regardless of major or career path.

## Program Requirements

- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2220 - Introduction to Communication Theory
- COM 2225 - Small Group Communication
- COM 2230 - Nonverbal Communication
- COM 2245 - Intercultural Communication
- COM 2235 - Principles of Interviewing OR
- COM 2287 - Effective Listening
- COM 2285 - Organizational Communication OR
- COM 2286 - Public Relations Principles


## Professional Firefighter, STC

## Program Code: PFC.S.STC • Credit Hours: 12

## Description

Provides training for full-time, part-time and volunteer firefighters to obtain the certifications necessary to meet the requirements of the National Fire Protection Association Standard 1001, Firefighter I and II. State of Ohio Certification from the Ohio Department of Public Safety and National Board on Fire Service Professional Qualifications.

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Career Opportunities

Professional firefighter in the State of Ohio.

## Program Prerequisite(s)

## Must have a valid motor vehicle operator's license

Program Requirements

- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Professional Writing, STC

## Program Code: PRW.S.STC • Credit Hours: 18

## Description

The Professional Writing Certificate offers appropriate courses for students and professionals interested in improving their writing, editing and computer skills for a future in professional writing or to enhance their marketability. The certificate is especially useful for those in professional and administrative positions in business, hospitality, health and human services.

## Career Opportunities

The Professional Writing Short Term Certificate is a valuable addition to many, if not all, majors at Sinclair. Students completing this certificate will learn writing and communication techniques essential in the workplace. Top jobs for students earning this certificate are in the copywriting, marketing, finance, grant, hospitality, legal, technical, health and business fields. Current research indicates that employers seek candidates who have expertise in writing in a professional setting, and students completing this certificate will acquire a facility with writing and language use in that environment.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1220 - Word Processing Software
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENG 1199-Textual Editing
- ENG 2257 - Creative Writing: Nonfiction OR
- JOU 2101 - Introduction to Journalism

Public Service Support, STC

## Description

The Public Service Support certificate is the first of three core certifications of the proposed Community \& Public Services Associate of Applied Science. Students learn how to provide assistance to Social Work and Social Service Professionals in the field. This certificate includes course work in the fields of sociology, psychology, social work, and human services and behavioral health and is designed to prepare students to work in the helping profession at an entry level position. This certificate prepares students to work with those in need to overcome difficulties and improve their lives. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.

## Career Opportunities

The Public Service Support certificate is employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve their degree in the Community \& Public Service AAS or their AA degree in Social Work, with additional coursework.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 2130 - Sociology of Family Violence
- SWK 1206 - Introduction to Social Work
- OT36 Arts and Humanities $\mathbf{3 C r}$. Hr.(s)


## Public Services Assistant, STC

Program Code: SSA.S.STC • Credit Hours: 20-21

## Description

The Public Services Assistant certificate is designed to provide the tools needed for employment with human service agencies emphasizing the skills of: communication, critical analysis of social problems, mediation, and investigative techniques. The inclusion of Mental Health Technology 1130, Introduction to Addictive Illness, provides an opportunity for the student to secure a Chemical Dependency Certified Assistant Certificate after state mandated criteria is met.

## Career Opportunities

The Public Service Assistant certificate is designed to provide the tools needed for employment with human service agencies.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2145 - Correctional Case Management OR
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary OR

- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- CJS 1165 - Corrections OR
- SOC 2205 - Social Problems OR
- SOC 2130 - Sociology of Family Violence


## Quality Control Technology, CRT

Program Code: QCT.S.CRT • Credit Hours: 30-32

## Description

This certificate prepares students to apply basic quality tools to the testing and inspection of mechanical systems and to take the Certified Quality Technician exam from the American Society for Quality.

## Career Opportunities

This certificate is geared both to students who desire an entry-level position in the area of mechanical inspection or to skilled workers desiring upgrade training.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- COM 2211 - Effective Public Speaking
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313 - Coordinate Measurement
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt
- MAT 1470 - College Algebra OR
- MAT 1580 - Precalculus

Radio Frequency Identification (RFID), STC

## Program Code: RFID.S.STC • Credit Hours: 6-7

## Description

This program is an introduction to the basics of Radio Frequency Identification (RFID) principles with a business or engineering technology orientation. Various RFID technologies, RFID project planning and implementation of basic business solutions or RFID hardware setup, maintenance and troubleshooting will be covered. Emphasis is on a team approach to management and technology aspects of design and implementation of a basic system.

## Career Opportunities

There is an ever-increasing use and adaptation of RFID technology in business, manufacturing and the defense industry.

## Program Requirements

- EET 2257 - Radio Frequency Identification (RFID) Capstone
- MAN 1157 - Management Applications of Radio Frequency Identification Technology OR
- EET 2157 - Radio Frequency Identification (RFID) Technology
- MAN 1106 - Introduction to Radio Frequency Identification


## Re-Entry Preparation, STC

## Program Code: REP.S.STC • Credit Hours: 12

## Description

The Re-entry Preparation Certificate is a one semester certificate that provides students with the minimum tools needed to reintegrate back into society. This certificate will focus on developing entry level computer skills, interpersonal communication, and the creation of a personal portfolio highlighting the education and skills obtained during incarceration.

## Career Opportunities

Students will obtain the basic skills needed to reintegrate back into society. Career opportunities include entry level occupations in all fields of labor. In many cases, students have gained viable vocational skills while incarcerated but are unable to successfully re-enter society because they lack basic computer skills and are unable to effectively create a personal portfolio to highlight those skills. This certificate will focus on developing basic level computer skills, interpersonal communication and the creation of a personal portfolio highlighting the education and skills obtained during incarceration.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1106-Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary OR

- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology


## Real Estate Sales Professional, STC

## Program Code: RESPROF.S.STC • Credit Hours: 18

## Description

This certificate is designed for the person who is interested in a career in real estate sales. The program includes the educational requirement for persons to sit for the Ohio real estate license exam: 40 hours of Real Estate Principles and Practices, 40 hours of Real Estate Law, 20 hours of Real Estate Finance, and 20 hours of Real Estate Appraisal. Students will also learn effective communication skills and how to use office applications.

## Career Opportunities

A career in real estate can be very rewarding. The U.S. Bureau of Labor Statistics says "Employment of real estate brokers and sales agents is projected to grow 7 percent from 2018 to 2028, about as fast as the average for all occupations" (Occupational Outlook Handbook). Additional careers include positions as title officers and examiners, property managers, and loan officers.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- RES 1101 - Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal


## Recovery Service Support, CRT

## Program Code: SWS.S.CRT • Credit Hours: 35

## Description

This certificate can assist graduates in providing client services in a wide variety of fields such as psychology, rehabilitation, social work, and family support. In addition, students may assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, and dependent care. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.

## Career Opportunities

Someone who completes the Recovery Service Support certificate may be employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve a degree in the Community and Public Service AAS or an AA Social Work with additional coursework.

## Program Requirements

- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 2205 - Social Problems
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work


## Reimbursement Analyst, STC

## Program Code: RMS.S.STC • Credit Hours: 19

## Description

The Reimbursement Analyst short-term certificate prepares students to work in a billing office for medical providers. The certificate will focus on preparing students to take the national certification examination to earn the credential Certified Medical Reimbursement Specialist (CMRS) offered by the American Medical Billing Association (AMBA). Students will be expected to complete a practicum experience to obtain this certificate, gaining work and hands-on medical billing skills.

## Career Opportunities

The Reimbursement Analyst short-term certificate prepares students to work in a billing office for medical providers. The certificate will focus on preparing students to take the national certification examination to earn the credential Certified Medical Reimbursement Specialist (CMRS) offered by the American Medical Billing Association (AMBA).

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1130 - Reimbursement Specialist Practicum
- MAS 2210 - Medical Billing Specialist
- MAT 1130 - Mathematics in Health Sciences


## Residential Real Estate Renovation and Resale, CRT

## Program Code: RERR.S.CRT • Credit Hours: 30

## Description

This program is designed for entrepreneurial individuals seeking to purchase, renovate, and resell residential properties. Students study business practices related to real estate and construction. Courses help develop hands-on skills applicable to residential renovation work, including carpentry, electrical, and HVAC work. Construction jobsite safety is emphasized. Graduates of this program possess skills necessary for residential real estate acquisition, renovation, and resale.

## Career Opportunities

Graduates have hands-on skills applicable to residential renovation work, including carpentry, electrical, and HVAC work, along with construction jobsite safety is emphasized. Graduates possess skills necessary for residential real estate acquisition, renovation, and resale.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ENT 2140 - Small Business Finance
- CAT 1201 - Construction Methods \& Materials
- CAT 1401 - Construction Cost Estimating
- CAT 2431 - OSHA Construction Standards
- CAT Construction Elective 5.5 Cr. $\mathbf{H r}(\mathbf{s})$.
- ENG 1101 - English Composition I OR
- ENG 1131 - Business Writing
- RES 1101 - Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1302 - Real Estate Investment: Analysis \& Financing
- RES 1401 - Real Estate Appraisal

Construction Electives

- CAT 1141 - Reading Architectural Drawings
- CAT 1701 - Construction Craft Skills/Concrete
- CAT 1721 - Structural Framing Systems
- CAT 1741 - Residential Electrical Systems
- CAT 1761 - Interior \& Exterior Finishes
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- CAT 2435 - Construction Credentials
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices


## Respiratory Care of the Newborn, STC

## Program Code: RCN.S.STC • Credit Hours: 4

## Description

Provides education to respiratory care practitioners to be oriented to neonatal respiratory care including history, fetal development, stabilization, evidence-based practices, and multi-disciplinary approaches. Includes respiratory devices employed for ongoing support of term and pre-term infants. Graduates will have a better knowledge of newborn resuscitation and stabilization. Student must be a licensed respiratory therapist.

## Career Opportunities

Graduates will have a better knowledge of respiratory care skills and pertinent information needed for newborn resuscitation and stabilization.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- RET 2301 - Respiratory Care of the Newborn I
- RET 2302 - Respiratory Care of the Newborn II
- RET 2303 - Respiratory Care of the Newborn III


## Retail Business, STC

## Program Code: RTB.S.STC • Credit Hours: 12

## Description

The Retail Business short-term certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to further build and develop their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

Individuals who complete this certificate will have gained further knowledge and skills that are crucial to being a successful supervisor. This certificate is the second step in the Retail Management Certificate which is designed to give incumbent retail workers the knowledge and skills required to be eligible for a promotion or raise within their current organization.

- ACC 1100 - Survey of Accounting
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- MRK 2100 - Foundations of Marketing


## Retail Management, STC

## Program Code: RMC.S.STC • Credit Hours: 24

## Description

The Retail Management certificate is a business program where students learn the key skills needed for retail management success. The Retail Management certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to further build and develop their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

The Retail Management Certificate program was created by experts in the industry to provide relevant knowledge and skills to their workforce. This program has successfully prepared nearly 2,000 graduates for management positions. Employees and employers benefit directly from the higher level of self-confidence and engagement displayed by graduates.

Recently recognized by the White House as part of the Upskill Initiative, the certificate is currently available in a variety of formats including face-to-face, on-line, and in a competency-based model.

The certificate program was established under the direction of the Western Association of Food Chains which includes many of today's leading retailers and wholesalers, and $7,500+$ supermarkets. The program also has endorsement from leading organizations including Food Marketing Institute (FMI) and National Grocers Association (NGA). Most recently, the Retail Management Certificate has gained recognition from highly respected entities such as the ACT Foundation, and the U.S. Department of Labor.

## Program Requirements

- ACC 1100 - Survey of Accounting
- BIS 1120 - Introduction to Software Applications
- ENG 1131 - Business Writing
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- MAN 2275 - Retail Management Capstone
- MRK 2100 - Foundations of Marketing


## Retail Manager, CRT

Program Code: RMG.S.CRT • Credit Hours: 33

## Description

The Retail Management certificate is a business program where students learn the key skills needed for retail management success. The Retail Management certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, manufacturing and service industries. This certificate enables students to further build and develop their skills toolbox that will enable them to be successful in the workplace. Additionally, students with justice-involved backgrounds will gain the necessary tools to obtain viable employment in a growing field..

## Career Opportunities

The Retail Manager technical certificate takes the Retail Management certificate one step further by providing students with the necessary skills to start or advance their career in the retail industry. Students will gain a greater understanding of the "why principles" thus enabling them to find their niche within the broad spectrum of retail careers..

## Program Requirements

- ACC 1100 - Survey of Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2275 - Retail Management Capstone
- MRK 2100 - Foundations of Marketing
- MRK 2220 - Small Business Marketing


## RN Scrub, STC

## Program Code: SRN.S.STC • Credit Hours: 1

## Description

This advanced short-term certificate is designed to provide Registered Nurses, who specialize in Perioperative Nursing, the opportunity to learn the technical skills required to perform in the role of the Scrub during surgical intervention. Students will be exposed to the knowledge and skills required to provide assistance to the surgeon performing surgical intervention during the intraoperative period.

## Career Opportunities

RN graduates of this short term certificate will be able to increase their role versatility in any facility in which surgical intervention takes place. Many students will already be employed in a surgical facility and completion will allow them to perform in the role of the Circulator or Scrub.

## Program Prerequisite(s)

Program Requirements

- SUT 2500 - RN Scrub


## Small Business Management, STC

## Program Code: SBM.S.STC • Credit Hours: 18

## Description

This certificate prepares existing or potential entrepreneurs in a variety of small business functions.

## Career Opportunities

Students completing this certificate can expect to be prepared for a management role in an existing small business or begin their own small business.

## Program Requirements

- ACC 1100 - Survey of Accounting
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MRK 2220 - Small Business Marketing


## Social Service, STC

Program Code: SOCS.S.STC • Credit Hours: 26

## Description

The Social Service Short-Term Certificate is designed to provide the tools needed for employees and volunteer leaders related to human service agencies and nonprofit organizations emphasizing the skills of: communication, critical analysis of social problems, investigative techniques, an understanding of the bureaucratic social and legal system serving the community and the role of the volunteer.

## Career Opportunities

This certificate enhances careers in sociology, social work, education, government, health care, public safety, human services, nonprofit organizations and related fields.

## Program Requirements

- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 2138 - Ethical Issues in the Helping Professions
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work


## Software Applications for the Professional, STC

## Program Code: SA.S.STC • Credit Hours: 18

## Description

This certificate provides office staff, managers, professionals and anyone interested in learning software applications and integration with the skills they need for their job. Students will have the opportunity to develop and refine their skills in a variety of current software used in today's work environments.

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities, to name a few.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1260 - Database Software


## Sports Management, CRT

## Program Code: SMAN.S.CRT • Credit Hours: 33

## Description

This certificate is designed to prepare students for careers in the field of sport and recreation management. Sports Management provides a solid foundation in sport related business. This certificate contains an embedded Coaching short-term certificate. Course work includes sports management, coaching, and leadership along with management, marketing, communication, business law, finance, and accounting. Students are prepared to enter a sports management profession.

## Career Opportunities

Students will have the opportunity to develop knowledge and relationships that lead to employment in one of Ohio's over 1,600 fitness centers and recreational sports centers. Students will have the foundational industry knowledge and business contacts necessary to pursue internships and careers.

## Program Requirements

- ACC 1100 - Survey of Accounting
- COM 2286 - Public Relations Principles
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 1114 - Introduction to Sports Management
- MAN 2144 - Negotiation Techniques
- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership
- MRK 2220 - Small Business Marketing


## Sports Nutrition Specialist, STC

## Program Code: SNS.S.STC • Credit Hours: 6

## Description

The sports nutrition specialist is equipped with the knowledge of evidence-based nutrition principles that include Dietary Guidelines for Americans, Dietary Reference Intakes, USDA Nutrition Guidelines, FDA Nutrition Guidelines, CDC Nutritional Guidelines, MyPlate, National Fruit \& Vegetable Consumption Coalition, and the Academy of Nutrition and Dietetics general nutrition guidelines and position papers. The sports nutrition specialist is trained to identify nutritionrelated acute and chronic illness as well as disordered eating practices that can then be referred to a nutrition professional. Knowledge of macronutrients and their relationship with exercise and performance are provided. Ergogenic aids, supplements, and fad diets are reviewed for efficacy. The sports nutrition specialist certificate, in conjunction with an accredited personal training credential provides the nutrition knowledge for the trainer to provide general evidence-based nutrition principles to a healthy population as it applies to exercise and performance.

## Career Opportunities

The Sports Nutrition Specialist certificate will provide a sports nutrition skill set that can be utilized in the Personal Training and Health Coaching workforce.

## Program Requirements

- DIT 1525 - Human Nutrition
- DIT 1825 - Nutrition for Exercise \& Sport Science


## Supervision Foundations, STC

## Program Code: SFD.S.STC • Credit Hours: 9

## Description

The Supervision Foundations short-term certificate gives students the basic tools needed to be a successful supervisor in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to begin building their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

Students completing this short-term certificate can continue with the Retail Management certificate program and be positioned for a promotion or raise in their current position.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- MAN 2101 - Introduction to Supervision


## Supervisory Skills, STC

## Program Code: BSP.S.STC • Credit Hours: 21

## Description

The Supervisory Skills certificate is useful to students who need to understand the foundation of supervision, no matter in which discipline they formally study. Engineers, business managers, architects, educators, and many other professionals need to understand how to better supervise employees. This certificate includes coursework that is foundational to understanding business and personnel concepts that will benefit supervisors in any capacity. This certificate is most useful for those who are new to supervision or to those who desire to become supervisors.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2160 - Principles of Macroeconomics OR
- ECO 2180 - Principles of Microeconomics
- LAW 1101 - Business Law
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MRK 2101 - Principles of Marketing Management


## Supply Chain Management, CRT

## Program Code: SCMC.S.CRT•Credit Hours: 30

## Description

Students gain a basic understanding of supply chain management processes to prepare them for a new position or to update the skills of those currently employed in a supply chain management (SCM) role.

## Career Opportunities

SCM specialists have opportunities for management positions at all levels in virtually every type of business, throughout small and
medium-sized businesses, corporations, industries, nonprofit organizations and government agencies.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2225 - Small Group Communication
- ENG 1131 - Business Writing
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency

Identification Technology

- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2101 - Introduction to Supervision OR
- MAN 2140 - Human Resource Management
- MAN 2110 - Introduction to Project Management OR
- MAN 2155 - Management Information Systems
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology


## Supply Chain Manager, CRT

## Program Code: SMC.S.CRT • Credit Hours: 34

## Description

This certificate takes the Supply Chain Technician STC one step further by preparing students with background issues in skills such as customer service and supervision by addressing the basic principles of management through an assessment of skills and an analysis of situational factors that lead to the development of creative approaches to supervision. This certificate contains foundational courses that apply towards AAS in Business Management/Supply Chain Management.

## Career Opportunities

Upon completion of this certificate, students will be prepared to work as an entry-level supervisor in the field of logistics, purchasing and warehousing.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAT 1120 - Business Mathematics
- SOC 1101 - Introduction to Sociology


## Surgical Instrument Technician, STC

## Program Code: SPT.S.STC • Credit Hours: 13

## Description

The Surgical Instrument Technician short-term certificate program will prepare the graduate to work within a health-care facility to ensure medical and surgical supplies, instruments, and equipment are properly cleaned, prepared, processed, stored, and distributed for patient care and surgical use. Knowledge of basic human anatomy, medical terminology, and a combination of sterilization, inventory control, and information technologies are integrated into the curriculum to ensure a safe outcome for all patients. This program combines both lecture, lab, and a practicum to prepare the Sterile Processing Technician student to take the CRCST Exam upon graduation and upon completion of 400 work related hours in a Sterile Processing Department. Hours attained during practicum count as credit toward the 400 work related hours required for CRCST Exam eligibility. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll. A grade of C or higher is required in all courses.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- HIM 1101 - Medical Terminology
- SUT 1100 - Sterile Processing I
- SUT 1200 - Sterile Processing II
- SUT 1207 - Practicum for Sterile Processing II


## Surveying, CRT

## Program Code: SUR.S.CRT•Credit Hours: 33-34

## Description

Certificate develops the skills needed to become employed as technicians for surveying or civil engineering firms.

## Career Opportunities

Surveying technicians assist professional surveyors in surveying for construction and land transfer activities.

## Program Requirements

- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2431 - OSHA Construction Standards
- CAT 2501 - GPS \& GIS for Engineering Technology Professionals
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2571 - NSPS Certified Survey Technician Preparation
- CAT 2581 - Legal Principles for Surveyors
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1200-Technical Mathematics OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- OT36 Social and Behavioral Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Tartan TOPS Program, STC

## Program Code: CTP.S.STC • Credit Hours: 25

## Description

The Tartan TOPS Program (Transition Options in Postsecondary Education) provides and educational/career pathway for students aged 18-24 who have an intellectual disability. This certificate program is a meaningful, academic credential that provides students with the necessary educational supports to learn life and work skills at the postsecondary level. The program uses embedded tutors in inclusive academic classes and provides students with internship opportunities in inclusive work and class-based settings While the first two semesters equip students with the academic skills needed to succeed in a postsecondary environment (including socially), the last two semesters provide the training and employment resources needed for students to become self-sufficient in the workplace and obtain competitive employment. Sinclair is committed to the values of community inclusion and self-determination and promotes the pursuit of postsecondary options that include academic enrichment, competitive employment, social engagement, and independent living for individuals with intellectual disabilities.

## Program Requirements

- COM 2206 - Interpersonal Communication
- SCC 1100 - Life Skills I
- SCC 1200 - Life Skills II
- SCC 1300 - Work Skills I
- SCC 1400 - Work Skills II
- SCC 2100 - Inclusive Internship

Any Course in Catalog $\mathbf{3}$ Cr. Hr.(s)

## Tax Practitioner, STC

## Program Code: TAXP.S.STC • Credit Hours: 15

## Description

The Tax Practitioner certificate prepares students for work in the tax preparation field. As tax law changes and grows more complex, more people seek professional tax preparation assistance. The Tax Practitioner certificate covers federal, state and local tax law. The Tax Practitioner certificate will prepare students for the Registered Tax

Preparer Exam that the Internal Revenue Service is instituted with the 2012 tax season.

## Career Opportunities

Tax preparers may work as employees for companies or work as an independent tax preparer.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- ACC 1510 - Computerized Accounting Systems
- ACC 2321 - Federal Taxation
- ACC 2322 - Advanced Taxation

Tissue Banking Technology, STC

## Program Code: TBT.S.STC • Credit Hours: 12

## Description

The Tissue Banking Technology certificate program prepares individuals to attain the skills necessary to become a certified tissue banking technologist. Tissue banking technologists are integral in the recovery, processing, storage and distribution of human tissue. Students in this program will gain basic knowledge of human anatomy, medical terminology, sterile techniques, surgical recovery and processing techniques, and all ethical and regulatory standards related to the field of Tissue Banking.

## Career Opportunities

Careers in Tissue Banking Technology are growing both locally and nationally, as interest in new graft technology continues to rise. Locally, CBCCTS has expanded its operations and opened a new processing facility that will increase current processing capacity by 40\%.

## Program Prerequisite(s)

## Restricted to Majors

## Program Requirements

- BIO 1107 - Human Biology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1110 - Math for Technologists
- SUT 1101 - Tissue Banking I
- SUT 1107 - Lab for Tissue Banking I
- SUT 2101 - Tissue Banking II
- SUT 2107 - Practicum for Tissue Banking II


## Tool Maker, CRT

Program Code: CAMTM.S.CRT • Credit Hours: 30

## Description

This certificate in tool making provides the student with the technical and hands-on experience required by employers in both an entry and apprenticeship level. This program will provide experience in safety, advanced manual machining, drafting and design, Computer Numerical Control (CNC) and conversational programming, welding and metal joining, measurement tools and techniques, and other instruction and experience needed within this trade. This program is available to anyone and works well with the apprenticeship model or those that need to work and learn at the same time.

## Career Opportunities

The Tool Maker certificate gives the student the technical skills and abilities needed by someone entering this career field either independently or as an apprentice. This program is designed to compliment a full-time apprenticeship or the student that is required to work full-time while seeking a career in the precision machining industry.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1116 - Fundamentals of Computer Numerical Control

Operations

- CAM 1180 - Welding \& Metal Joining I
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Trauma Informed Care in Education, STC

## Program Code: EDU.S.STC • Credit Hours: 12

## Description

Trauma Informed Care in Education is a four-course certificate that provides students a foundational understanding of trauma effects on the brain, culturally sensitive approaches, and resources to equip educators in a trauma-informed classroom.

## Career Opportunities

This certificate will provide an overview of how adverse childhood experiences impact child development, social emotional development, and how early childhood trauma impacts brain development. The content of the courses in this certificate will aid teachers in preschool through grade 12 in assessing and addressing the needs of children who have experienced trauma and will provide strategies to develop a trauma-sensitive classroom environment. Additionally, the certificate will examine historical and current racial, ethnic, gender, sexual orientation, linguistic, and social class stereotypes and biases as related to youth in the United States and globally.

## Program Requirements

- EDU 2101 - Introduction to Early Childhood Trauma
- EDU 2102 - Understanding the Brain \& Trauma
- EDU 2103 - Trauma-Informed Classrooms
- SOC 2210 - Cultural Humility for Working with Youth


## UAS Entrepreneurship, CRT

## Program Code: UASENT.S.CRT • Credit Hours: 33

## Description

This certificate integrates technical Unmanned Aerial Systems (UAS) curriculum with business and entrepreneurship courses. There is a need in the Unmanned Aerial Systems (UAS) industry for entrepreneurial technicians who have the knowledge and skills to apply advanced technology and intellectual property (IP) in a variety of high-tech applications. Related to UAS, this includes aircraft, sensors, avionics, software, data analytics, and other advanced technologies.

## Career Opportunities

There are many opportunities in the Unmanned Aerial Systems (UAS) industry, both for those seeking to develop their own business or those hired as employees of an existing firm. In either case, the application of entrepreneurial knowledge and best practices, complimented by technical knowledge, is required in a competitive UAS industry that is driven by rapid advances in technology and applications. Students completing this certificate will be prepared for success as they seek to establish and grow their own ventures or support an established organization.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAT 1470 - College Algebra
- MET 1131 - Personal Computer Applications for Engineering

Technology

- MRK 2220 - Small Business Marketing


## UAS First Responders, STC

## Program Code: UASFR.S.STC • Credit Hours: 16

## Description

The UAS First Responders Short-Term Technical certificate prepares students for entry level positions in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge, skills and proficiency in UAS theory, capabilities and scenario based objectives related to the first responder industry.

## Career Opportunities

The demand for Unmanned Aerial Systems is increasing at a phenomenal rate. A shift in military strategies and the demand for use in the private sector as well as other government agencies has fueled an industry which is estimated to explode to over $\$ 80$ billion in the next decade. With local government agencies and First Responder personnel in need of new technological options for fast and safe mission execution. The Dayton region and its Educational Institutions are primed to take advantage of the opportunity as industry leaders.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1108 - UAS First Responder Applications
- AVT 2150 - Crew Resource Management for UAS
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1155 - Homeland Security Issues \& Administration
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory


## UAS for Geographic Information Systems, STC

## Program Code: UASGIS.S.STC • Credit Hours: 16

## Description

The UAS for GIS (Geographic Information Systems) Short-Term Technical certificate prepares students for entry level positions as GIS analysts in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge and skills involving GIS technologies and UAS technology.

## Career Opportunities

The Unmanned Aerial System platform capabilities include but are not limited to aerial mapping and remote sensing for geographic information systems. The private sector as well as governmental demands for Unmanned Aerial System personnel in geospatial information and remote sensing applications are in high demand.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1114 - Geospatial Information for UAS
- AVT 2150 - Crew Resource Management for UAS
- CAT 1501 - Fundamentals of Surveying \& Mapping
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization


## UAS Precision Agriculture, STC

## Program Code: UASAG.S.STC • Credit Hours: 16

## Description

The UAS Precision Agriculture Short-Term Technical Certificate prepares students for entry level positions in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge and skills involving Precision Agriculture and UAS Technology.

## Career Opportunities

Precision Agriculture is expected to be $80 \%$ of the UAS market over the next decade. Industry projections and demands indicate that the UAS precision agriculture market will be one of the five industries that benefit first from FAA rules and regulation changes. With agriculture being the number one industry in the state of Ohio and contributing 107 billion dollars a year to the Ohio economy. Agricultural industry needs in drought management, disease detection, watering, and spraying pesticides make UAS an intelligent and affordable option.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1200 - Agricultural Economics
- AGR 1300 - Agronomy
- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1112 - UAS Precision Agriculture
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization


## Unmanned Aerial Systems, CRT

## Program Code: UAS.S.CRT•Credit Hours: 32-34

## Description

The Unmanned Aerial Systems One Year Technical Certificate prepares students with the foundational knowledge and skills related to Unmanned Aerial System technology, tools, and applications needed to support industry as a pilot/operator, visual observer, ancillary ground crew member, or data analyst while following applicable laws, regulations, and standards governing operations in the National Airspace System. Students may choose one of the four specialization options including Precision Agriculture, First Responders, Geographic Information Systems, or Aerial Sensing Data Analysis.

## Career Opportunities

The rapid growth of the Unmanned Aerial Systems industry has created many new and expanded career opportunities for those pursuing a career in civil and commercial applications of the technology. Major opportunities exist in the areas of Precision Agriculture, First

Responders, Geographic Information Systems, and Aerial Sensing Data Analysis. There is current and expanding industry demand for personnel with capabilities in Unmanned Aerial System operations, maintenance and data analysis.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- MET 1131 - Personal Computer Applications for Engineering Technology
- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging

Data Analysis AND

- AVT 1123 - Acoustic \& CBRNE Data Analysis AND
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1108 - UAS First Responder Applications AND
- CJS 1101 - Introduction to Criminal Justice Science AND
- CJS 1155 - Homeland Security Issues \& Administration AND
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory OR
- AVT 1114 - Geospatial Information for UAS AND
- CAT 1501 - Fundamentals of Surveying \& Mapping AND

GEO 1107 - Introduction to Geographic Information Systems (GIS) OR

- AVT 1112 - UAS Precision Agriculture AND
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200 - Agricultural Economics AND
- AGR 1300 - Agronomy


## Urban and Community Agriculture, CRT

## Program Code: UCA.S.CRT • Credit Hours: 31

## Description

The Urban and Community Agriculture Certificate will equip students with basic knowledge of plant science that is used for the growth, development, and utilization of cultivated plants. This knowledge will allow the students to propagate plants, implement sustainable landscape design, understand the science of soil, and will ultimately enable the student to operate and manage a greenhouse.

## Career Opportunities

This certificate will provide the skills for growing sustainable food in urban areas and communities.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1203 - Trees \& Shrubs
- AGR 1204 - Plant Propagation
- AGR 1205-Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design
- AGR 1209 - Greenhouse Management Capstone
- ENT 2140 - Small Business Finance


## Veterinary Assistant, STC

## Program Code: VET.S.STC Credit Hours: 19

## Description

This certificate program will prepare the student to work within the veterinary hospital, assisting the veterinary technician (nurse) and veterinarian (doctor) with animal care by learning and practicing professionalism, client service, animal behavior and restraint, medical assisting, laboratory protocols and collection and preparation of samples, surgical suite care and preparation of animals, and anesthetic monitoring for the stable patient. Students will be offered the opportunity to become Fear Free (R) certified during this program. This certificate will focus on the care of small animals (dogs and cats), but students interested in large animal or exotic animal care may be able to be placed in a suitable clinic in which to gain that experience.

## Career Opportunities

A Veterinary Assistant is a vital member of the medical/patient-care team in a veterinary hospital. Veterinary Assistants do not need to be certified in the state of Ohio in order to work in a veterinary practice, but this program is designed to create a professional, well-trained, experienced employee who will be able to fit into a variety of practices. The veterinary profession lacks sufficient paraprofessionals in this region, the state of Ohio, and the nation - additional trained staff can help to alleviate the stress on current workers. Veterinary assistants are also valuable in other animal-related fields, such as kennel-worker, groom, animal trainer, and animal care-giver (petsitter).

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PSY 1100-General Psychology
- VET 1102 - Introduction to Veterinary Technology I
- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2107 - Technical Practicum I OR
- VET 2108 - Veterinary Assistant Technical Practicum


## Video Production, STC

# Program Code: VID.S.STC • Credit Hours: 22 

## Description

This certificate introduces students to the basics of video production, including lighting \& cinematography and audio production. Students will learn the design process, appropriate applications and video and audio equipment to create quality videos.

## Career Opportunities

There are several positions to fill in the digital video production profession. You could work in television, advertising, or news reporting. You also could apply your skills in education, government, or business industries. Within these settings, you could hold entry-level positions in a variety of positions, such as a video editor, camera operator, audio editor, or live stream operator. As well, there are freelance opportunities.

## Program Requirements

- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design


## Web Design, STC

## Program Code: WEB.S.STC • Credit Hours: 21

## Description

This short-term certificate introduces students to the basics of web coding and design, including conceptualizing, designing, developing, and maintaining websites. Students will learn a variety of web design concepts and digital design applications.

## Career Opportunities

Students successfully completing this short-term certificate will have the necessary skills to apply for entry level work in the field of web design and development for businesses, government and design agencies.

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design

Web Programming, STC

## Program Code: WW1.S.STC • Credit Hours: 18

## Description

The Web Programming certificate is designed to provide an individual with current web development skills. It focuses on techniques for developing web-based distributed applications using standard languages and protocols such as HTML, JavaScript, CSS, XML, PHP and ASP.NET. It is designed for experienced software developers to update their skills and for individuals wishing to make a career change into the Information Technology field. The certificate focuses on web application development in a client/server networked environment.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts and network engineers.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2212 - Java Software Development I
- CIS 2222 - ASP.NET with C\#
- CIS 2250 - Web Site Development with php


## Welding and Metal Joining, STC

## Program Code: CAMWM.S.STC • Credit Hours: 18

## Description

This certificate in welding and metal joining contains in-depth handson labs which will include MIG, TIG, Stick (ARC), and Ox-acetylene use along with other types of metal joining options and instruction to include sheet metal layout, shearing, bending, riveting, brazing and spot welding. Welding safety, personal protection equipment, and special welding tools will be taught in-depth and used by the students within the lab setting. The other courses within the certificate offer an introduction to the manufacturing processes used in the tooling, machining, the welding industry, a focus on blueprint reading, design using AutoCAD, various measurement techniques and the mathematics necessary to solve applications in welding and manufacturing technology.

## Career Opportunities

This in-depth training will ready students for entry level positions in Machine repair, Die and Mold repair, Metal Fabrication, Tool and Die shops, general repair shops and general manufacturing.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1180 - Welding \& Metal Joining I
- CAM 1181 - Welding \& Metal Joining II
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Welding, Metal Joining, \& Fabrication, CRT

## Program Code: CAMWMF.S.CRT•Credit Hours: 30

## Description

Based on an Industry need this certificate meets specific needs in precision Welding, Metal Joining and Fabrication techniques that will align and work in conjunction with student and industry needs. This certificate will help students already working in industry and allow others to build skills that will help with entry level employment. This certificate program contains the Welding and Metal Joining (CAMWM.S.STC) embedded certificate which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate, please notify Registration and Student Records at studentrecords@ sinclair.edu.

## Career Opportunities

The student successfully completing this certificate will have the necessary skills and knowledge to design, build, weld and repair in a wide variety of situations which will be an addition to current skills or allow entry into many manufacturing careers which desire non-certified welders. These careers can range from entry level to higher level positions in Machine repair, Die and Mold repair, Metal Fabrication, Tool and Die shops, general repair shops and general manufacturing.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control

Operations

- CAM 1180 - Welding \& Metal Joining I
- CAM 1181 - Welding \& Metal Joining II
- CAM 1182 - Welding \& Metal Joining III
- CAM 1184 - Weldability of Ferrous \& Nonferrous Metals
- CAM 2114 - Jig \& Fixture Design
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Workforce Readiness, STC

Program Code: WFR.S.STC • Credit Hours: 6

## Description

The Workforce Readiness certificate will provide students skills to help returning citizens overcome reentry and employment barriers.

## Career Opportunities

This certificate will start students on the path of workforce readiness.

## Program Requirements

- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills


## Degree Programs

## Associate of Arts

## Art, AA

## Program Code: ART.S.AA • Credit Hours: 65

## Description

The Art university parallel program is oriented toward students who intend to transfer to a four-year college or university. The Art curriculum challenges students' creative thinking abilities with its studio and art history courses. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

For students who want a career in art, the faculty of working professional artists will advise and assist in developing techniques and a body of work that will transfer well to other colleges and universities. If the goal is to set up a working studio after graduation, students will be given the necessary information by the faculty. Although the most obvious career for college graduates with art degrees is that of fine artists, there are other opportunities which require the skill, knowledge and talents gained through the study of art. These include art teachers, art historians, art curators and art therapists.

## Program Requirements

- ART Art History Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- ART ART Concentration Elective $\mathbf{6 C r} \mathbf{~ H r}(\mathbf{s})$.
- ART ART Elective $9 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- ART ART 2D or 3D Elective $\mathbf{3 C r} \mathbf{~ H r}(\mathbf{s})$.
- ART 1101-2-D Foundations
- ART 1102-3-D Foundations
- ART 1111 - Drawing I
- ART 2230 - Art History: Ancient through Medieval Periods
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 2270 - Fine Art Internship
- ART 2295 - Graduation Portfolio Development \& Exhibition
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Social \& Behavioral Sciences Elective (from two or more discplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Arts \& Humanities Elective (May not be an ART course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Drawing Concentration (2D)

- ART 1112 - Drawing II
- ART 2111 - Intermediate Drawing I

Life and Anatomy Concentration (2D)

- ART 2216 - Life Drawing \& Anatomy I
- ART 2217 - Life Drawing \& Anatomy II

Painting Concentration (2D)

- ART 1121 - Beginning Painting I
- ART 1122 - Beginning Painting II

Photography Concentration (2D)

- ART 1161 - Black \& White Darkroom Photography I AND
- ART 1162 - Black \& White Darkroom Photography II OR
- ART 2265 - Digital Color Photography I OR
- ART 1170 - Alternative Photographic Processes OR
- ART 1171 - Studio Photography

Printmaking Concentration (2D)

- ART 2269 - Printmaking I
- ART 2279 - Printmaking II

Ceramics Concentration (3D)

- ART 1141 - Introduction to Ceramics
- ART 1142 - Intermediate Ceramics

Sculpture Concentration (3D)

- ART 1131 - Introduction to Sculpture
- ART 1132 - Intermediate Sculpture

2D Electives

- ART 1112 - Drawing II
- ART 1121 - Beginning Painting I
- ART 1122 - Beginning Painting II
- ART 1161 - Black \& White Darkroom Photography I
- ART 1162 - Black \& White Darkroom Photography II
- ART 1170 - Alternative Photographic Processes
- ART 1171 - Studio Photography
- ART 1175 - Computer Photography
- ART 2111 - Intermediate Drawing I
- ART 2112 - Intermediate Drawing II
- ART 2216 - Life Drawing \& Anatomy I
- ART 2217 - Life Drawing \& Anatomy II
- ART 2221 - Intermediate Painting-Observation \& Concept
- ART 2222 - Intermediate Painting - The Figure
- ART 2265 - Digital Color Photography I
- ART 2269 - Printmaking I
- ART 2279 - Printmaking II
- ART 2280 - Intermediate Printmaking I
- ART 2281 - Intermediate Printmaking II
- ART 2285 - Printmaking - Monotype


## 3D Electives

- ART 1131 - Introduction to Sculpture
- ART 1132 - Intermediate Sculpture
- ART 1133 - Figurative Sculpture
- ART 1141 - Introduction to Ceramics
- ART 1142 - Intermediate Ceramics
- ART 2141 - Advanced Ceramics

Art History Electives

- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- ART 2239 - History of Asian Art


## Associate of Arts, AA

## Program Code: LA.S.AA • Credit Hours: 60

## Description

The Associate of Arts-Liberal Arts is designed for students who are planning to transfer to a four-year college or university in a variety of majors, including education. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Transferring students can select specific electives based on the requirements of their intended major at the receiving institution. Students should communicate with the receiving institution early into their educational program and are required to work with an academic advisor to select appropriate courses. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Students will graduate with a general understanding of the complex nature of human society. Introductory knowledge of communication,
critical thinking and inter-cultural awareness will transfer to baccalaureate programs or as soft skills in a variety of industries.

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) 9 Cr.
$\mathrm{Hr}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two
disciplines) $9 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- Any Course in Catalog Elective - $20 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s}$ ).


## Communication Studies, AA

## Program Code: COM.S.AA • Credit Hours: 62

## Description

Communication is the study of interactions between people in interpersonal, small group, public speaking, organizational and massmedia settings. This degree can lead to successful transfer to a fouryear college or university baccalaureate program. Through careful course selection, a program of study can be planned to satisfy a student's particular educational and career interests.
Enhancing communication skills provides invaluable benefits for all students, regardless of major. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

A communication degree can provide opportunities in journalism, speech education, business, industry, government, broadcast media, law, ministry, social services, public relations, or provide valuable communication skills to enrich any career. Through careful course selection, a program of study can be planned to satisfy your particular educational and career interests. Enhancing communication skills provides invaluable benefits for all students, regardless of major or career path.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2220 - Introduction to Communication Theory
- COM 2225 - Small Group Communication
- COM 2278 - Communication Capstone
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $3 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Any Group $6 \mathbf{C r}$. Hr(s).
- SCC 1101 - First Year Experience
- Any Course in Catalog Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Communication/Journalism Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.

Communication/Journalism Electives

- COM 2230 - Nonverbal Communication
- COM 2235 - Principles of Interviewing
- COM 2245 - Intercultural Communication
- COM 2285- Organizational Communication
- COM 2286 - Public Relations Principles
- COM 2287 - Effective Listening
- JOU 2101 - Introduction to Journalism
- JOU 2203 - Reporting \& Writing for Media


## Creative Writing, AA

## Program Code: CRWE.S.AA • Credit Hours: 61

## Description

The Creative Writing Program is designed specifically for students interested in studying how to write original creative work, including poetry, fiction, and nonfiction. Students hone their writing skills and learn about the world of publishing in this program, as well. Graduates of this program are well-prepared to transfer to a four-year college or university to continue their studies. The curriculum fulfills the freshman and sophomore general education requirements of most fouryear colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- ENG 2250 - Introduction to Creative Writing
- ENG 2262 - Writing to Publish


## Choose three courses from:

- ENG 2255 - Poetry Writing AND/OR
- ENG 2256 - Fiction Writing AND/OR
- ENG 2257 - Creative Writing: Nonfiction AND/OR
- ENG 2259 - Novel Writing
- LIT 2220 - Introduction to Literature
- LIT 2217 - Images of Women in Literature OR
- LIT 2234 - Literature of Africa, Asia, \& Latin America OR
- LIT 2236 - African-American Literature
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r . ~ H r ( s ) . ~}$
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $9 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- Language Elective 4 Cr. $\mathbf{H r}(\mathbf{s})$.

Language Elective 4 Cr . Hr .

- CHN 1101 - Elementary Chinese I
- FRE 1101 - Elementary French I
- GER 1101 - Elementary German I
- JPN 1101 - Elementary Japanese I
- SPA 1101 - Elementary Spanish I


## Elementary Education, AA

Program Code: ELEE.S.AA • Credit Hours: 62

## Description

This Associate of Arts degree program in Elementary Education is designed to serve as a transfer degree for those students interested in teacher education in Pre-K through 12th grade. All courses in this degree are Ohio Transfer 36 (OT36) courses or Transfer Assurance Guide (TAG) courses and are designed to transfer seamlessly to any state (and some private) Ohio colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

This degree will serve as a degree for students to transfer to 4 -year programs for teacher education in grades PreK-12th.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ECE 1101 - Introductory Child Development
- ECE 2200 - Families, Communities \& Schools
- EDU 1100 - Introduction to Education
- EDU 1105 - Individuals with Exceptionalities
- EDU 1109 - Effective Classroom Management \& Learning Environments
- EDU 1111 - Classroom Observation K-12 Field Experience
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HIS 1102 - United States History II OR
- HIS 1112 - Western Civilization II
- MAT 2415 - Mathematics for Elementary Education I
- MAT 2435 - Mathematics for Elementary Education II
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective 7 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (may not be PSY) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100-General Psychology
- PSY 2242 - Educational Psychology
- Any Course in Catalog Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## English, AA

## Program Code: ENGE.S.AA • Credit Hours: 62

## Description

The Associate of Arts in English comprises an array of literature courses that introduces students to the world of literature. Students planning to transfer to a four-year program in English or a related field will have a strong foundation based on the broad English curriculum, which also fulfills the first and second year general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II

Choose two literature electives:

- LIT 2201 - British Literature I AND/OR
- LIT 2202 - British Literature II AND/OR
- LIT 2211 - American Literature I AND/OR
- LIT 2212 - American Literature II
- LIT 2217 - Images of Women in Literature
- LIT 2220 - Introduction to Literature
- LIT 2230 - Great Books of the Western World
- LIT 2234 - Literature of Africa, Asia, \& Latin America
- LIT 2236 - African-American Literature
- OT36 Arts \& Humanities Elective (May not be LIT course) 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $9 \mathbf{C r} . \mathrm{Hr}(\mathrm{s})$.
- SCC 1101 - First Year Experience
- Associate of Arts Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- Language Elective 4 Cr. $\mathbf{H r}$ (s).


## Language Elective

Choose one course from:

- CHN 1101 - Elementary Chinese I
- FRE 1101 - Elementary French I
- GER 1101 - Elementary German I
- JPN 1101 - Elementary Japanese I
- SPA 1101 - Elementary Spanish I


## Description

Geography is the study of Earth's landscapes, peoples, places and environments. It provides a knowledge of the Earth's physical and human systems and of the interdependency of living things and physical environments. The Associates of Arts Degree in Geography is designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs in geography or related fields. The curriculum fulfills the freshman and sophomore general education requirements for most four-year colleges and universities. In addition, the program offers a one-year certificate in Geographic Information Systems. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Ample opportunities exist for students with a degree in geography. The US Department of Labor projects "much faster than average growth in excess of $20 \%$ or more, in jobs for geographers, and other geographic professionals." A list of possible careers include: Environmental Scientist/Analyst, Natural Resource Management, Urban and Regional Planning, Education, GIS Analyst, Tourism, International Development, Marketing Analyst, Demographer, Park Ranger and Environmental Conservation. Note: Some career opportunities may require more than two years of college study.

## Program Requirements

- BIO 2225 - Ecology
- CIS 2165 - Database Management
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- GEO 1101 - Global Forces, Local Diversity
- GEO 1102 - Earth's Physical Environment
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1201 - World Regional Geography: People, Places \&

Globalization

- GEO 1209 - Map Design \& Visualization
- GEO 2210 - Advanced Spatial Analysis
- GLG 1101 - Physical Geology AND
- GLG 1111 - Physical Geology Laboratory OR
- GEO 1300 - Introduction to Weather \& Climate
- HUM 1135 - Environmental Ethics
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be HUM course) 3 Cr.

Hr(s).

- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Language Electives $\mathbf{8 C r}$. $\mathbf{H r}(\mathbf{s})$.


## History, AA

## Description

An Associate of Arts in History introduces students to broad periods of the human experience. History, though, is more than just the study of the past. Students will also develop cultural literacy, critical thinking, and other skills that inform global citizenry. These skills can prepare students planning to transfer to a four-year college or university and pursue a baccalaureate degree in history or a related field, providing a foundation for careers in teaching, journalism, archival work, government, politics, and law. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HIS 1101 - United States History I
- HIS 1102 - United States History II
- HIS 1111 - Western Civilization I
- HIS 1112 - Western Civilization II
- HIS 1105 - African-American History OR
- HIS 2218 - History of Ohio

Choose two courses from:

- HIS 2215 - Survey of African History AND/OR
- HIS 2216 - Survey of Latin American History AND/OR
- HIS 2217 - Survey of East Asian History AND/OR
- HIS 2219 - Survey of the Middle East
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be HIS course) 3 Cr.
$\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Associate of Arts Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.


## Math Education, AA

## Program Code: MED.S.AA•Credit Hours: 62

## Description

This program is for students who wish to pursue teaching mathematics in grades 7-12. The course content includes mathematics and education courses that students need during the first two years of a bachelor's degree program in Math Education. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

With a completed bachelor's in Math Education students will be able to be a Math Teacher in grades 7-12.

## Program Requirements

- COM 2211 - Effective Public Speaking
- EDU 1100 - Introduction to Education
- EDU 1103 - Educational Technology OR
- SOC 2210 - Cultural Humility for Working with Youth
- EDU 1105 - Individuals with Exceptionalities
- EDU 1109 - Effective Classroom Management \& Learning Environments
- EDU 1111 - Classroom Observation K-12 Field Experience
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II OR
- MAT 2320 - Linear Algebra
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- PSY 1100 - General Psychology
- PSY 2242 - Educational Psychology
- OT36 Social \& Behavioral Sciences Elective (may not be PSY course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.

Hr(s).

- OT36 Natural \& Physical Sciences Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Modern Languages, AA

## Program Code: FORE.S.AA • Credit Hours: 60-62

## Description

The Associate of Arts in Modern Languages is designed for students who are planning to transfer to a four-year university as a Chinese, French, German, Japanese, or Spanish major, or into a major for which modern language is a strong base. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.

Hr(s).

- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Any Group 9 Cr. Hr(s).
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- First-year Language Electives $\mathbf{8 \mathbf { C r } . \mathbf { H r } ( \mathbf { s } ) .}$

Student may choose either the second year of the same foreign language or the first year of a different foreign language:

- Second-year Foreign Language Electives $\mathbf{8 C r} \mathbf{~ H r}(\mathbf{s})$. OR
- First-year Language Electives 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.


## Multimedia Journalism, AA

## Program Code: COMMJ.S.AA • Credit Hours: 61

## Description

Communication is the study of interactions between people in interpersonal, small group, public speaking, organizational and massmedia settings. The Multimedia Journalism degree is a collaboration of the Communication, Journalism and Visual Communication programs. Multimedia journalism is presently the fastest growing area of journalism. It will also prove valuable for students who plan to transfer to a four-year college or university baccalaureate program to continue their studies in journalism or mass communication. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Multimedia journalism is the fastest growing area of journalism, and this degree prepares students to work as producers for news and corporation websites. Students may also elect to transfer to a fouryear college or university baccalaureate program to continue their studies in journalism or communication.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2225 - Small Group Communication
- COM 2278 - Communication Capstone
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- JOU 2101 - Introduction to Journalism
- JOU 2203 - Reporting \& Writing for Media
- JOU 2270 - Journalism Internship
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r . ~ H r ( s ) . ~}$
- OT36 Natural \& Physical Sciences Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two discplines) $6 \mathbf{C r} . \mathrm{Hr}(\mathbf{s})$.
- OT36 Any Group 6 Cr. Hr(s).
- SCC 1101 - First Year Experience

Music, AA

## Program Code: MUS.S.AA • Credit Hours: 65

## Description

The Associate of Arts in Music is designed for students who will be transferring to a four-year institution for further studies upon graduation in music education, music performance, or any baccalaureate program in music. The A.A. curriculum fulfills the requirements of the first two years of a bachelor of music, with special emphasis on public performance. An audition is required upon entering the program and a solo recital is required before graduation. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MUS 1110 - Music Technology for Music Majors
- MUS 1111 - Music Theory I
- MUS 1112 - Aural Skills I
- MUS 1113 - Music Theory II
- MUS 1114-Aural Skills II
- MUS 2111 - Music Theory III
- MUS 2112 - Aural Skills III
- MUS 2113 - Music Theory IV
- MUS 2114 - Aural Skills IV
- MUS 2117 - Survey of Musical Styles I
- MUS 2118 - Survey of Musical Styles II
- MUS Applied Instrument Elective $8 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Student must take the appropriate major ensemble from the following:

- MUS 2231 - Chorale for Majors OR
- MUS 2241 - Music Practicum for Majors OR
- MUS 2243 - Concert Band for Majors OR
- MUS 2245 - Classical Guitar Ensemble for Majors

Secondary Instrument (piano students must take voice while all other student must take piano):

- MUS 1115 - Piano for Music Majors I AND
- MUS 1116 - Piano for Music Majors II AND
- MUS 2115 - Piano for Music Majors III AND
- MUS 2116 - Piano for Music Majors IV OR
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice AND
- MUS 1119 - Secondary Voice
- OT36 Arts and Humanities Elective (at least two disciplines and may not include MUS 1121) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.


## Political Science, AA

## Program Code: PLSE.S.AA • Credit Hours: 61

## Description

An Associate of Arts in Political Science degree exposes students to the political thought, processes, and behavior of governments, institutions, and organizations. The study of political science provides one with the concepts, theories and methods necessary to analyze problems scientifically. These tools serve as an underpinning for a level of civic engagement constructed around critical thinking and cultural literacy, and can be applied in a wide range of careers including government, law, business, international organizations, nonprofits, journalism, and teaching. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- PLS 1120 - American Federal Government
- PLS 1232 - State \& Local Government
- PLS 2200 - Political Life, Systems \& Issues
- PLS 2220 - International Relations
- SCC 1101 - First Year Experience
- Multicultural Electives $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Associate of Arts Elective $\mathbf{1 2} \mathbf{~ C r} . \mathbf{H r}(\mathbf{s})$.


## Psychology, AA

## Program Code: PSYE.S.AA • Credit Hours: 60

## Description

The Associate of Arts in Psychology prepares students for entry-level positions in fields such as education, mental health, and community service. The curriculum includes courses in social psychology, abnormal psychology, human development, and personality psychology, as well as current psychological theory and practice. This degree prepares students to directly enter the workforce and it transfers well to most 4-year colleges and universities. As part
of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Graduates are employed as psychiatric and mental health technicians, case workers or managers, victim advocates, residential/ group home specialists, and in a variety of other positions in which knowledge of human behavior and mental processes is beneficial, including sales and marketing, human resources, community service agencies, administrative positions, and others.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathbf{s})$.
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (May not be PSY course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PSY 2220 - Personality Psychology
- PSY 2225 - Social Psychology
- Psychology Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PSY 1160 - Black Psychology OR
- PSY 2180 - Psychology of Gender
- SCC 1101 - First Year Experience
- Associate of Arts Elective $\mathbf{8 C r} \mathbf{~ H r}(\mathbf{s})$.

Psychology Electives

- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2214 - Drugs \& Behavior
- PSY 2218 - Principles of Counseling
- PSY 2228 - Industrial Organizational Psychology
- PSY 2235 - Behavioral Science Research Methods
- PSY 2236 - Behavioral Science Statistics
- PSY 2242 - Educational Psychology
- PSY 2250 - Behavior Modification
- PSY 2270 - Psychology Service Learning


## Social Work, AA

Program Code: SWKE.S.AA • Credit Hours: 60-62

## Description

Social Work is a profession for people who want to help those in need to overcome difficulties and improve their lives. The Associate of Arts in Social Work is dedicated to students wishing to transfer to a four year university in Social Work or a related field. With an associate's, students can begin working in the field as paraprofessionals in social service settings. Social Work will provide students with skills and knowledge necessary to help people with a wide range of issues including psychological/mental health, behavioral, financial, health, relationships, and substance abuse problems. At the Associate's level, students complete practicum and service learning opportunities and explore skills related to advocacy and case management as well as skills related to working with multicultural client populations. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Social Work is a helping profession which aims to assist individuals, families, and larger groups; as well as targeting the social problems which effect society today. The Department of Labor Statistics shows the job outlook for Social Work is projecting growth in the field of $19 \%$ between 2012 and 2022 which is faster than the average growth for other occupations. There is an increased demand for social work in fields such as aging and healthcare. Social Work allows opportunities for licensure and higher education which lead to more open doors for employment in the field. Social Workers are found in almost every facet of society including in the medical field such as hospitals and nursing homes, child welfare, schools, jails, and private practice.

## Program Requirements

- BIO 1111 - General Biology I
- BIO 1211 - General Biology II OR
- OT36 Natural and Physical Science Elective
- COM 2206 - Interpersonal Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts and Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective $\mathbf{3 C r} \mathbf{~ H r}(\mathbf{s})$.
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary OR

- OT36 Social and Behavioral Sciences Elective
- PLS 1120 - American Federal Government OR
- PLS 2200 - Political Life, Systems \& Issues
- PSY 1100-General Psychology
- SCC 1101 - First Year Experience
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work
- Modern Language Electives 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.


## Sociology, AA

## Program Code: SOCE.S.AA • Credit Hours: 60

## Description

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. The Associates of Arts in Sociology can lead to successful transfer to a four-year college or university baccalaureate program. Sociology provides 21st century skills for all students regardless of the major: The ability to critically analyze social problems/issues necessary for responsible decision making; a systematic approach to information gathering and interpretations of data; a fundamental comprehension of multi-cultural differences and global diversity. With an associate's, students can begin working in the field as paraprofessionals in social service \& business settings. The curriculum fulfills the freshman and sophomore general education requirements for most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.

Hr(s).

- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 8 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- PSY 1100-General Psychology
- SCC 1101 - First Year Experience
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 1160 - Sociology of Aging
- SOC 2205 - Social Problems
- SOC 2215 - Race \& Ethnicity
- Associate of Arts Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.


## Sport and Recreation Education, AA

## Program Code: PED.S.AA • Credit Hours: 65

## Description

This program is designed for sport and recreation careers and will fulfill the freshman and sophomore educational requirements at most
four-year colleges or universities. Sport and Recreation provides two years of a solid foundation in sport related business. It also contains a Coaching short-term certificate. Course work includes management, marketing, coaching, and leadership along with many other respective components of the industry. Students are prepared to enter the profession or transfer for completion of a baccalaureate degree. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Sport and Recreation Education gives the student a variety of options. The student could work in sports information, promotions, ticket sales, media relations, event management, tournament planning and marketing and facility management. Some careers will require a baccalaureate degree.

## Program Requirements

- ALH 1132 - Heartsaver First Aid, CPR \& AED
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 2419 - Health Promotion, Fitness \& Sport Programming
- ENT 2140 - Small Business Finance
- GLG 1101 - Physical Geology
- GLG 1201 - Historical Geology
- HIS 1111 - Western Civilization I
- HIS 1112 - Western Civilization II
- MAN 1107 - Foundations of Business
- MAN 1114 - Introduction to Sports Management
- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership
- MAN 2270 - Management Internship
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (may not be PSY course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MRK 2220 - Small Business Marketing
- PSY 1100 - General Psychology


## Theatre Performance, AA

## Program Code: THEP.S.AA • Credit Hours: 61

## Description

The theatre performance degree is designed as a university-parallel program for students to transfer to four-year institutions. The faculty and staff are theatre professionals with extensive experience in acting, directing, playwriting and choreography. Curriculum is based on skills required to enhance students' performance including: voice, movement, character and script analysis, dance, auditioning and presentation. Successful students achieve real-world experience participating in our theatre productions in several performance venues. Students must pass all THE courses with a grade of C or better. As part of this degree
program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Accreditation

Sinclair's Theatre Performance Program is accredited by the National Association of Schools of Theatre (NAST).

## Career Opportunities

Employment opportunities are available in areas such as performer, director, educator, dramaturge, playwright, arts administrator, company business or artistic manager. These positions can commonly be found in theatre, film, television commercials, voice over work, theme parks, cruise ships, education, and modeling. A theatre performance degree also provides skills to enrich any career that requires artistic research, presentations, customer service, confidence or communication.

## Program Prerequisite(s):

## Approval of Department

## Program Requirements

- COM 2211 - Effective Public Speaking
- DAN 1172 - Ballet OR
- DAN 1173 - Modern Dance OR
- DAN 1174 - Jazz Dance I OR
- DAN 1175 - Tap Dance
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be THE course) 3 Cr. $\mathrm{Hr}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two
disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- THE 1105 - Introduction to Theatre
- THE 1106 - Stagecraft
- THE 1107 - Lab for Stagecraft
- THE 1111 - Acting I
- THE 1212 - Voice For The Actor
- THE 1194 - Applied Theatre Technology I
- THE 1194 - Applied Theatre Technology I
- THE 1196 - Applied Theatre Technology II
- THE 1199 - Applied Theatre Performance
- THE 2115 - Movement For The Actor
- THE 2201 - History of Theatre I
- THE 2202 - History of Theatre II
- THE 2206 - Script Analysis
- THE 2216 - Acting II


## Theatre Technology, AA

Program Code: THET.S.AA • Credit Hours: 62

## Description

The theatre technology degree is a university-parallel program designed for transfer to four-year institutions. Faculty and staff are theatre professionals with extensive experience in design and technology: scenic, lighting, costumes, props, sound, directing and stage management. Curriculum is based on skills to enhance students' technical skills in stage craft, lighting and costume fundamentals, and stage management. Successful students achieve real-world experience with theatre productions in several performance venues. Students must pass all THE courses with a grade of C or better. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Employment opportunities are available in areas such as designer, technician, director, educator, stage manager, arts administrator and company business or artistic manager. These positions can commonly be found in theatre, film, theme parks, cruise ships, rock shows, museums, churches, or fashion. A theatre technology degree also provides the skills to enrich any career that requires artistic research, safety troubleshooting, management, and creative problem solving.

## Accreditation

Sinclair's Theatre Technology Program is accredited by the National Association of Schools of Theatre (NAST).

## Program Prerequisite(s):

## Approval of Department

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1445 - Quantitative Reasoning OR
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective (May not be THE course) 3 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective 6 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two
disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- THE 1105 - Introduction to Theatre
- THE 1106 - Stagecraft
- THE 1107 - Lab for Stagecraft
- THE 1103 - Principles of Acting OR
- THE 1111 - Acting I
- THE 1116 - Stage Lighting Fundamentals
- THE 1117 - Lab for Stage Lighting Fundamentals
- THE 1118 - Costume Fundamentals
- THE 1119 - Lab for Costume Fundamentals
- THE 1194 - Applied Theatre Technology I
- THE 1194 - Applied Theatre Technology I
- THE 1196 - Applied Theatre Technology II
- THE 1196 - Applied Theatre Technology II
- THE 2201 - History of Theatre I
- THE 2202 - History of Theatre II
- THE 2206 - Script Analysis
- THE 2220 - Theatre Portfolio
- THE 2240 - Stage Management
- THE 2296 - Applied Theatre Technology IV


## Associate of Science

## Associate of Science, AS

## Program Code: LA.S.AS • Credit Hours: 60-62

## Description

The Associate of Science is designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs such as Biology, Chemistry, Geology, Mathematics, Physics and Pre-professional programs, i.e. Medicine, Pharmacy, etc. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1450 - Introductory Statistics OR
- MAT 1455 - Introduction to Data Science OR
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 2215 - Mathematics for Machine Learning \& Artificial

Intelligence OR

- MAT 2240 - Calculus for the Life Sciences OR
- MAT 2570 - Discrete Mathematics OR
- MAT 2270 - Calculus \& Analytic Geometry I
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective 12 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- Any Course in Catalog Elective - $20 \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Biology, AS

Program Code: BIOE.S.AS • Credit Hours: 60

## Description

The Associate of Science in Biology is designed for students who are planning to transfer to a four-year college or university and pursue a baccalaureate degree in biology. The curriculum fulfills the freshman and sophomore requirements of most colleges and universities. The
biology courses offer a solid foundation in key areas of biology such as cell biology, genetics, evolution, and ecology with a broad survey of life on Earth. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 to graduate.

## Career Opportunities

Studying biology opens the door to a wide variety of teaching, research, and service careers including health sciences, forensic science, environment, agriculture, and science writing. Students of the biological sciences find jobs in colleges and universities, primary and secondary schools, museums, zoos, nature centers, hospitals, clinics, and laboratories. Governments need the expertise of biologists to formulate sound policies and legislation. Many non-profit organizations, businesses, and industries also depend on biologists to fulfill their missions.

## Program Requirements

- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- BIO 2222 - Evolution
- BIO 2225 - Ecology
- BIO 2235 - Genetics
- BIO 2236 - Lab for Genetics
- CHE 1211 - General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Mathematics Elective $\mathbf{3} \mathbf{~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Business Administration, AS

## Program Code: BUS.S.AS • Credit Hours: 63

## Description

The University Parallel program is designed for the student who wants to pursue a baccalaureate degree at a four-year institution in a business discipline. The purpose of the degree program is to provide the basic core of business and general education requirements for the first two years of a four-year program. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENG 1201 - English Composition II OR
- MAT 2180 - Business Statistics II
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MRK 2101 - Principles of Marketing Management
- MAT 2160 - Calculus for Business \& Economics
- MAT 2170 - Business Statistics I
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (May not be ECO course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Chemistry, AS

## Program Code: CHEE.S.AS • Credit Hours: 61

## Description

The Associate of Science degree in Chemistry fulfills the freshman and sophomore general education and degree-specific requirements for students transferring to programs which require General and Organic Chemistry at most four-year colleges and universities. Recipients of this degree may be able to apply for laboratory technician or research assistant positions. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Studying chemistry opens the door to a wide variety of teaching, research, industrial, clinical and service careers including health sciences, forensics, environment, manufacturing and science writing. Chemistry graduates find jobs in colleges and universities, primary and
secondary schools, clinics and laboratories. Governments rely on the expertise of chemists to formulate sound policies and legislation and many non-profit organizations, businesses, and industries hire chemists who use their skills to meet the goals of the organization.

## Program Requirements

- CHE 1211 - General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I
- CHE 2151 - Lab for Organic Chemistry I
- CHE 2121 - Organic Chemistry II
- CHE 2161 - Lab for Organic Chemistry II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two
disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Computer Science, AS

## Program Code: CS.S.AS • Credit Hours: 61

## Description

Course work will focus on giving students a foundational knowledge of computer science concepts such as mathematics and programming skills. Furthermore, this Associate of Science degree will provide students a much needed transfer pathway to Computer Science Bachelor Degrees at four-year universities. As part of this degree program, students must complete the requirements of theOhio Transfer 36 in order to graduate.

## Accreditation

This program is fully accredited by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

According to Ohio Bureau of Labor Information data, statewide increases of $18.1 \%$ for Software Developers; Applications, and 7.8\% for Software Developers; Systems Software, are projected between 2014 and 2024.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2207 - Data Structures \& Algorithms OR
- CIS 2266 - Python for Data Analytics
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective 18 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathrm{s})$.
- OT36 Natural \& Physical Sciences Elective 9 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Engineering and Engineering Technology University Transfer, AS

Program Code: ESUP.S.AS • Credit Hours: 60-62

## Description

The Engineering and Engineering Technology University Transfer Associate degree programs are for students who plan to attend a fouryear college or university for a degree in Engineering Science or Engineering Technology. This program is designed to bring an entering student up to the level of a third year university student in Engineering or Engineering Technology. Course sequence is designed to transfer the basic requirements of most universities. The student is strongly advised to consult the particular school he or she will be entering as well as a Sinclair academic advisor, before signing up for any courses. Please see an academic advisor for the listing of available electives and assistance in selecting electives toward your major that will be accepted by the receiving transfer institution.

As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Students complete this program to transfer to a four-year institution to study various engineering disciplines to complete a BS degree in Engineering

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- OT36 Arts and Humanities (at least two discplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 2201 - General Physics I AND
- PHY 2207 - Lab for General Physics I OR
- PHY 1141 - College Physics I
- PHY 2202 - General Physics II AND
- PHY 2208 - Lab for General Physics II OR
- PHY 1142 - College Physics II OR
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- Engineering Technology Elective OR
- Engineering Science Elective 24 Cr. $\mathbf{H r}(\mathbf{s})$.


## Engineering Technology Electives

- CIS 1202 - C++ Software Development
- CAM 1109 - Fundamentals of Tooling \& Machining
- EET 1116 - Electronics Schematics \& Fabrication
- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1131 - Business Writing
- ENG 1201 - English Composition II
- ISE 1100 - Product Development Fundamentals
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2240 - Six Sigma: Green Belt
- MAT 1450 - Introductory Statistics
- MAT 2240 - Calculus for the Life Sciences
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 1301 - SolidWorks Basics
- MET 2101 - Thermodynamics
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics


## Engineering Science Electives

- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- CAT 1301 - Civil Construction CAD
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II AND
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I AND
- CHE 2151 - Lab for Organic Chemistry I
- CHE 2121 - Organic Chemistry II AND
- CHE 2161 - Lab for Organic Chemistry II
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2207 - Data Structures \& Algorithms
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2550 - Linux Operating System
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2131 - Engineering Digital Design
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1201 - English Composition II
- GLG 1101 - Physical Geology AND
- GLG 1111 - Physical Geology Laboratory
- GLG 1201 - Historical Geology AND
- GLG 1211 - Historical Geology Laboratory
- MAT 2170 - Business Statistics I
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- MAT 2320 - Linear Algebra
- MAT 2330 - Differential Equations \& Linear Algebra
- MAT 2570 - Discrete Mathematics
- MAT 2600 - Applied Statistics
- MEE 2101 - Statics for Engineers
- MEE 2201 - Thermodynamics for Engineers
- MEE 2301 - Strength of Materials for Engineers
- MEE 2401 - Dynamics for Engineers
- MET 1301 - SolidWorks Basics
- PHY 2210 - MATLAB for Scientists \& Engineers


## Geology, AS

## Program Code: GLGE.S.AS • Credit Hours: 60

## Description

The Associate of Science degree in Geology is designed for students planning to transfer to a four-year college or university and pursue a Baccalaureate Degree Program in the Earth Sciences. The curriculum approximates the freshman and sophomore general education requirements of most four-year colleges and universities. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Careers in the Earth Sciences are highly diverse and in global demand. They can be found at local, state and federal levels, in private industry, and in education. Natural resource sustainability, global climate change, natural hazard management, water supply issues, and contamination remediation are continuing to be pressing, global issues that require involvement from Earth Scientists. Earth scientists also play an important role in the development of environmental policies and regulations.

- CHE 1211 - General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1251 - Lab for General Chemistry I
- CHE 1261 - Lab for General Chemistry II
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- GLG 1101 - Physical Geology
- GLG 1111 - Physical Geology Laboratory
- GLG 1201 - Historical Geology
- GLG 1211 - Historical Geology Laboratory
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- PHY 2201 - General Physics I
- PHY 2202 - General Physics II
- PHY 2207 - Lab for General Physics I
- PHY 2208 - Lab for General Physics II
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Health Sciences Pre-Professional Studies, AS

## Program Code: PPS.S.AS • Credit Hours: 62-64

## Description

The Sinclair Health Sciences Pre-Professional Studies degree provides a flexible pathway for students interested in the following professions who wish to pursue transfer to a university program through an academic pathway* to the following Health Science Professions: Doctor of Dental Sciences, Medical Doctor, Doctor of Osteopathy, Physician's Assistant, Doctor of Pharmacy, Doctor of Physical Therapy, Doctor of Veterinary Medicine. This degree does include some patient-interaction through work-based learning or clinical practicums. *Students will be advised that different professional schools have different pre-requisites and they must consult their intended school of study to determine their best curricular pathway to complete their prerequisites. Further courses may be needed in order to meet the pre-requisites required by different programs. Communication with an Academic Adviser is strongly recommended. This list is not inclusive. Further professional program prerequisites may be identified as students indicate interest.

## Career Opportunities

This highly transferable degree has been designed for the student interested in a medical degree in one of the following fields: Doctor of Osteopathy (DO), Medical Doctor (MD), Doctor of Dental Surgery (DDS), Doctor of Veterinary Medicine (DVM), Doctor of Pharmacy (DP), Doctor of Physical Therapy (DPT), or Physician's Assistant (PA). Completion of this degree will position the student with over 60 credits toward entry to a University program as well as clinical experience in the field of interest (a requirement of many professional schools.) Working closely with an Academic Adviser, the student will be able to
design their program to best fit the requirements of their intended profession and intended school of transfer.

## Program Requirements

- ALH 1102 - Basic Healthcare Practices \& Medical Scribe
- ALH 1120 - Nurse Aide Training OR
- ALH 1250 - Health Science Practicum
- BIO 1171 - Principles of Biology I
- BIO 1272 - Principles of Biology II
- CHE 1211 - General Chemistry I
- CHE 1251 - Lab for General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1261 - Lab for General Chemistry II
- CHE 2111 - Organic Chemistry I
- CHE 2151 - Lab for Organic Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HUM 1135 - Environmental Ethics OR
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (student must have two Arts/Humanities from different discplines) $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- MAT 2240 - Calculus for the Life Sciences OR
- MAT 2270 - Calculus \& Analytic Geometry I
- OT36 Natural \& Physical Sciences Elective 9 Cr. Hr(s).
- OT36 Social \& Behavioral Sciences Elective (must be a non-PSY course) $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology


## Mathematics, AS

## Program Code: MATE.S.AS • Credit Hours: 60-62

## Description

The curriculum of the Associate of Science in Mathematics degree is designed to correspond to both the math and general education courses that a student would take in the first two years of pursuing a Bachelor's degree in math at a four-year institution. Coursework can be customized to fit interests in Statistics/Actuarial Science, Secondary Math Education, or Pure/Applied Mathematics. Students will get a solid grounding in the mathematics that is applied in the physical science and engineering disciplines, and an introduction to more theoretical mathematics. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Actuary, Statistical Consultant, Investment Analyst, Cryptographer, Operations Researcher, High School or College-Level Teacher. Visit www.maa.org/careers/career-profiles for more examples. For more information on these and other careers, including employment outlook and working conditions, go to www.ohcis.intocareers.org and login with username "sinclaircoll" and password "ohiocis03".

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations OR
- MAT 2600 - Applied Statistics AND
- Any Course in Catalog OR
- CIS 1111 - Introduction to Problem Solving \& Computer Programming AND
- CIS 2212 - Java Software Development I AND
- Any Course in Catalog
- MAT 2320 - Linear Algebra OR
- CIS 2217 - Java Software Development II
- OT36 Arts \& Humanities Elective (at least two disciplines) $6 \mathbf{C r}$.
$\mathrm{Hr}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $\mathbf{1 0} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathrm{Hr}(\mathbf{s})$.
- SCC 1101 - First Year Experience
- Multicultural Electives $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Physics, AS

## Program Code: PHYE.S.AS • Credit Hours: 62-64

## Description

The Associate of Science in Physics is designed for students who are planning to transfer to a four-year college or university and pursue a baccalaureate degree program in Physics. The curriculum fulfills the freshman and sophomore general education requirements along with the required first year physics courses offered at most four-year colleges and universities. Physics majors will develop a solid understanding of the fundamental laws of physics in addition to acquiring strong analytical and laboratory skills. As part of this degree program, students must complete the requirements of the Ohio Transfer 36 in order to graduate.

## Career Opportunities

Physics can be the pathway to a variety of careers such as research scientists, astrophysicists, material scientists, radar project managers, gravity researchers, and many types of engineers.

## Program Requirements

- CHE 1211 - General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 1251 - Lab for General Chemistry I
- CHE 1261 - Lab for General Chemistry II
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2320 - Linear Algebra OR
- MAT 2330 - Differential Equations \& Linear Algebra OR
- PHY 2210 - MATLAB for Scientists \& Engineers
- OT36 Arts \& Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathrm{s})$.
- OT36 Social \& Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- PHY 2201 - General Physics I
- PHY 2202 - General Physics II
- PHY 2203 - Introduction to Modern Physics
- PHY 2207 - Lab for General Physics I
- PHY 2208 - Lab for General Physics II
- PHY 2780 - Scientific Thought \& Method


## Associate of Applied Science

## Accounting, AAS

## Program Code: ACC.S.AAS • Credit Hours: 64

## Description

Accountants prepare, analyze and verify financial reports and monitor information systems that furnish this information to management. Business executives, bankers, government leaders and investors all rely on financial statements and other reports prepared by accountants that summarize and interpret financial transactions that occur in every business. An accountant must have the ability to develop reliable analyses of business operations which can be used in making business decisions. Students who complete the accounting program can qualify to sit for the CPA exam in Ohio after completing a few additional courses and a qualifying exam as determined by the Ohio Board of Accountancy.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for-profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- ACC 1510 - Computerized Accounting Systems
- ACC 2101 - Intermediate Accounting I
- ACC 2102 - Intermediate Accounting II
- ACC 2211 - Cost Accounting
- ACC 2212 - Managerial Accounting \& Finance
- ACC 2321 - Federal Taxation
- ACC 2435 - Auditing
- ACC Accounting Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- LAW 1101 - Business Law
- MRK 2101 - Principles of Marketing Management
- MAN 1107 - Foundations of Business
- MAT 1460 - Mathematics for Business Analysis OR
- MAT 1470 - College Algebra
- MAT 2170 - Business Statistics I
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Accounting Electives

- ACC 2270 - Accounting Internship
- ACC 2322 - Advanced Taxation
- ACC 2510 - Advanced Accounting
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- LAW 1102 - Consumer Law
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1110 - International Business
- MAN 2110 - Introduction to Project Management
- MRK 2145 - Principles of Retailing


## Addiction Services, AAS

## Program Code: MHTCD.S.AAS • Credit Hours: 65

## Description

In the Mental Health and Addiction Services department, the Addiction Services degree program prepares entry-level professionals for employment working on an inter-disciplinary team with clinical supervision in chemical dependency treatment settings. Graduates of this program work directly with a diverse group of clients. The program can be taken full-time or part- time. If enrolled full-time, it is designed to be completed in five (5) semesters. It consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. Second-year practicum hours can be submitted toward partial employment requirements of the Ohio Chemical Dependency Professionals Board (OCDP). To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the web page. A
cumulative GPA of 2.0 is required, as well as an initial faculty advising appointment during MHT 1101. A grade of C or higher is required in all program courses. The practicum portion of the curriculum provides 420 hours of supervised experience. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Addiction Services graduates can work at hospitals, substance use disorder treatment centers, and numerous other field-related positions in the community. Graduates have completed the 180 hours of specific education required to sit for the LCDC II exam. The OCDP Board has other requirements for licensure.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1111 - General Biology I
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 1201 - Interviewing Skills
- MHT 1202 - Motivational Interviewing
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2105 - Mental Health Treatment Methods
- MHT 2111 - Group Dynamics I
- MHT 2121 - Practicum I
- MHT 2137 - Treatment Techniques in Substance Use Disorders
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2211 - Group Dynamics II
- MHT 2222 - Practicum II
- MHT 2235 - Family Dynamics of Addiction
- PSY 1100 - General Psychology
- PSY 2217 - Abnormal Psychology
- SWK 2207 - Anti-Oppressive Social Work


## Agricultural Sciences, AAS

## Program Code: AGR.S.AAS • Credit Hours: 62

## Description

The Agricultural Sciences Program offers competency in specialized skill areas such as Unmanned Aerial System Precision
Agriculture, Alternate and Renewable Energy Sources, and Hazardous Waste Operations and Emergency Response. Graduates of an Agricultural Sciences Program will contribute to filling the current and growing need within the state of Ohio for educated Agricultural
personnel. External certificates that will be offered to students within the curriculum include; OSHA Basic Safety in the Workplace, OSHA, Agricultural Safety, HAZWOPER, Pork Quality Assurance, Beef Quality Assurance, ServSafe, +/- Bovine Artificial Insemination.

## Career Opportunities

The associate degree program in Agricultural Sciences prepares competent entry-level Agricultural personnel with additional potential expertise in the following added areas: Agribusiness, Large Animal Sciences, Horticulture, Diesel Mechanics, and Precision Agriculture in UAS. The agricultural sciences are an important part of our past as well as our future, and educated personnel are more in-demand as safer, more specialized workers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- AGR 1160 - Introduction to Agriculture Science
- AGR 1300 - Agronomy OR
- AGR 1110 - Introduction to Large Animal Sciences: Handling \& Husbandry
- AGR 1400 - Agriculture Internship
- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1112 - UAS Precision Agriculture
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- BTN 1110 - Biotechnology \& Bioethics
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- EGV 1101 - Alternate \& Renewable Energy Sources
- ENG 1101 - English Composition I
- FST 1555 - Hazardous Waste Operations \& Emergency Response (HAZWOPER)
- LAW 1101 - Business Law AND
- AGR 1200-Agricultural Economics OR
- AGR 1111 - Principles of Large Animal Reproduction OR
- AGR 1112 - Principles of Large Animal Nutrition
- MRK 2100 - Foundations of Marketing
- MRK 2135 - Digital Marketing
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural \& Physical Sciences Elective $3 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.


## Applied Psychology, AAS

## Program Code: PSY.S.AAS • Credit Hours: 60

## Description

The Applied Psychology program will prepare students for entry level positions in a number of fields including research, behavioral analysis, education, mental health, and community service. The coursework will emphasize development of skills and knowledge to enable students to work in high-demand areas related to applied research and behavioral analysis. The curriculum includes courses in research design and statistics, behavior analysis and modification, industrial/organizational psychology, and human factors psychology, as well as current psychological theory and practice. The curriculum includes many Ohio Transfer 36 (OT36) courses and fulfills many general education requirements. This degree prepares students to directly enter the workforce and it transfers well to most 4 -year colleges and universities.

## Career Opportunities

Graduates may be employed as research assistants, project/research coordinators, information analysts, behavioral skills technicians, and teaching/special education aides. Graduates also work as psychiatric and mental health technicians, case workers or managers, victim advocates, residential/group home specialists, and in a variety of positions where knowledge of human behavior and mental processes is beneficial (i.e. salesperson, human resources specialist, employee at not-for-profit agencies, administrative assistant, etc.).

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3}$ Cr. Hr.(s)
- OT36 Arts \& Humanities Elective (from two or more disciplines) 6 Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective (must not be PSY) 3

Cr. Hr.(s)

- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PSY 2225 - Social Psychology
- PSY 2228 - Industrial Organizational Psychology
- PSY 2235 - Behavioral Science Research Methods
- PSY 2236 - Behavioral Science Statistics
- PSY 2250 - Behavior Modification
- PSY Applied Psychology Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Any course in catalog elective $\mathbf{3} \mathbf{C r}$. Hr.(s)


## Applied Psychology Electives

- PSY 1160 - Black Psychology
- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2214 - Drugs \& Behavior
- PSY 2218 - Principles of Counseling
- PSY 2220 - Personality Psychology
- PSY 2242 - Educational Psychology
- PSY 2270 - Psychology Service Learning


## Architectural Technology, AAS

## Program Code: ARC.S.AAS • Credit Hours: 62-65

## Description

The Architectural Technology program helps students develop skills applicable in a variety of Built Environment professions, including architectural, engineering and design practices, contracting firms, and material suppliers. Building Information modeling (BIM) and Integrated Project Design (IPD) are core principles taught throughout the curriculum, with Autodesk Revit being the primary BIM tool. Environmental responsibility is emphasized, with students taking a USGBC LEED exam prep course. Curriculum tracks are available for both building technology and building design.

## Career Opportunities

Graduates are employed as drafters for architectural firms, inspectors and project managers in the construction industry. Many opportunities exist in the building materials and assemblies sales and supply area.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 1341 - Architectural Design I
- CAT 2101 - Architectural Design II
- CAT 2201 - Architectural Visualization
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2700 - Architectural Technology Internship
- CAT 2780 - Architectural Technology Capstone
- COM 2211 - Effective Public Speaking
- EGV 1301 - Architectural Energy Analysis
- EGV 2351 - LEED Green Associate Exam Preparation
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 1200-Technical Mathematics
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PHY 1100 - Introduction to Physics OR
- PHY 1141 - College Physics I
- Architectural Technology Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Architectural Technology Electives

- ART 1111 - Drawing I
- ART 1112 - Drawing II
- CAT 1131 - Introduction to Revit MEP
- CAT 1141 - Reading Architectural Drawings
- CAT 1161 - Introduction to the Built Environment
- CAT 1401 - Construction Cost Estimating
- CAT 2401 - Construction Project Management
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \&

Project Delivery

- CAT 2630 - Architectural Practice Project Deliverables \&

Contractual Obligations

- CAT 2640 - Construction Project Change Management
- CAT 2741 - Current Topics in Architecture
- EGV 1251 - Introduction to Energy Management Principles
- IND 1180 - History \& Theory of Interior Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2140 - Sustainable Design
- VIS 1140 - Design Processes I


## Automation \& Control Technology with Robotics, AAS

## Program Code: AMCT.S.AAS • Credit Hours: 62-68

## Description

The Automation and Control Technology with Robotics program builds knowledge in the application of electrical and mechanical skills for developing, installing, programming and troubleshooting the complex machinery found in the modern manufacturing and Supply Chain environments.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

This program prepares graduates for control system technician and designer, electrical and electronic systems engineering technician, industrial equipment sales, purchasing, installation, and service. Graduates will also be prepared to assume roles as industrial maintenance technician, plant maintenance technician, robotics technician, system integrators, and supply chain technician.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 1131 - Digital Electronics OR
- EET 1198 - Digital Technology
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231 - Troubleshooting of Automated Systems
- EGR 2252 - Teach Pendant Robot Programming
- EGR 2278 - Automation \& Control Capstone
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 2711 - Ethics for Engineering Technology Professionals
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- EET 2157 - Radio Frequency Identification (RFID) Technology OR
- EGR 2250 - Electromechanical Repair
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MET 1301 - SolidWorks Basics
- EGR 2256 - Automated Data Acquisition Systems OR
- EGR 2261 - Engineering Problem Solving using "C" \& "C++" OR
- EGR 2275 - Automation \& Control Technology Internship OR
- EGR 2250 - Electromechanical Repair


## Automotive Technology (GM ASEP), AAS

Program Code: ASEP.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in General Motors Automotive Service Educational Program (ASEP) provides training for students aspiring to become automotive technicians for General Motors dealerships or AC Delco independent shops. Specific General Motors training is presented to apprentice student technicians as they apply learned content to a co-op work experience. Students attend classes for half a semester and then apprentice at a GM/ AC Delco sponsoring dealership the other half. Students are paid for work rendered during the co-op experience. Upon graduation, students will receive hundreds of hours of official General Motors training credits that are recorded in the corporation's training database. Graduates should be 85 to $90 \%$ trained towards meeting the certification requirements for a GM Master Technician. Graduates will also receive an Associate of Applied Science from Sinclair along with a job opportunity from the sponsoring dealer. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training
programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in General Motors dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness to work and a high degree of professionalism may expect to find jobs in middle management or research occupations within major automotive corporations.

## Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- AUT 1108 - Automotive Engine Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology


## Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology (Honda PACT), AAS

## Description

This Associate of Applied Science program provides training for students aspiring to become Honda/Acura dealership technicians and requires students to co-op at a Honda or Acura dealership. Students receive specific Honda technical training resulting in training, credits/certifications from the corporation. These credits/ certifications help a student secure employment with a Honda/ Acura dealership.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.

Automotive Electives

- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology (Mopar CAP), AAS

## Program Code: CAP.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in the Mopar Career Automotive Program (CAP) provides training for students aspiring to become automotive technicians for Chrysler, Dodge, Jeep, and Ram dealerships. Specific Chrysler training is presented to apprentice student technicians as they apply learned content to a co-op work experience. Students attend classes for half a semester and then apprentice at a Fiat Chrysler Automobile sponsoring dealership the other half. Students are paid for work rendered during the co-op experience. Upon graduation, students will receive hundreds of hours of official Chrysler training credits that are recorded in the corporation's training database. Graduates should be $85 \%$ to $90 \%$ trained towards meeting the certification requirements for a Chrysler Master Technician. Graduates will also receive an Associate of Applied Science from Sinclair along with a job opportunity from the sponsoring dealer.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE Accredited Training Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in Chrysler, Dodge and Jeep dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness to work and a high degree of professionalism may expect to find jobs in middle management or research occupations within major automotive corporations.

## Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 1170 - Automotive Internship I
- AUT 1171 - Automotive Internship II
- AUT 1172 - Automotive Internship III
- AUT 1173 - Automotive Internship IV
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology


## Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems
- AUT 2297 - Special Topics


## Automotive Technology, AAS

## Program Code: AUT.S.AAS • Credit Hours: 65

## Description

The Associate of Applied Science in Automotive Technology provides training for students aspiring to become automotive technicians. Training in automotive management and business operations is a component of the program. To earn the associate degree students must participate in a capstone course offered only during the day or complete four paid internship courses with an automotive service facility.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Sinclair Automotive Technology program is an ASE AccreditedTraining Program at the Master Automobile Service Technology level by the ASE Education Foundation. The ASE Education Foundation was founded as an independent, nonprofit organization with a single mission: To evaluate technician training programs against standards developed by the automotive industry. The ASE Education Foundation accreditation process has resulted in certified automotive training programs in all 50 states at the secondary and post-secondary levels.

## Career Opportunities

Graduates are finding excellent employment opportunities existing in dealerships, independent service facilities, machine shops and other automotive businesses. Graduates may also find employment as automotive instructors or sales, service and parts managers.

## Program Requirements

- AUT Automotive Elective 2 Cr. $\mathbf{H r}(\mathbf{s})$.
- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems
- AUT 1170 - Automotive Internship I AND
- AUT 1171 - Automotive Internship II AND
- AUT 1172 - Automotive Internship III AND
- AUT 1173 - Automotive Internship IV OR
- AUT 2250 - Automotive Service Operations
- CAM 1109 - Fundamentals of Tooling \& Machining OR
- CAM 1180 - Welding \& Metal Joining I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Automotive Electives

- AUT 1100 - Consumer Automotive
- AUT 1111 - Automotive Service Consulting \& Advising
- AUT 1170 - Automotive Internship I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems
- AUT 2226 - High Performance Fabrication
- AUT 2230 - Hybrid Electric Vehicle Systems
- AUT 2240 - Automotive Diesel Systems


## Aviation Maintenance Technology, AAS

## Program Code: AVIAO.S.AAS • Credit Hours: 89

## Description

This program leads to an Associate of Applied Science in Aviation Maintenance Technology and provides the knowledge and skills required by the Federal Aviation Administration (FAA) for certification as an Aviation Maintenance Technician (AMT). To become an AMT, two ratings are required, the Airframe (A) and the Powerplant (P); this is commonly referred to as an "A\&P Certificate". Students will complete the requirements for Sinclair's General, Airframe and Powerplant Aviation Maintenance certificates and will refine the knowledge and skills they have learned with extensive hands-on training in the aviation maintenance lab. Students, having completed this course work, will be eligible to test for the FAA A\&P Certificate. The graduate can either continue towards a bachelor's degree in aviation (or related field) or can begin a career as an AMT. Sinclair is an FAA-approved Aviation Maintenance Technician School (AMTS) under Part 147.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The programs General and Airframe certificates are approved by the FAA under air agency certificate XSCT086K.

## Career Opportunities

The Bureau of Labor Statistics projects "favorable future job opportunities" over the long term as older mechanics and technicians retire. Maintenance Repair Organizations (M.R.O.s) are contracting for the work that airlines used to do in house. Many of the M.R.O.s are in need of maintenance technicians. Boeing Commercial Aircraft Company recently predicted $1,000,000$ more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next 15-20 years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1106 - Airframe Safety Systems
- AVT 1107 - Fuel Systems
- AVT 1113 - Drawings for Aviation
- AVT 1116 - Regulations for Maintenance
- AVT 1118 - Weight \& Balance
- AVT 1128 - Powerplant Safety Systems
- AVT 2122 - Ignition \& Starting
- AVT 2126 - Reciprocating Engines
- AVT 2129 - Propellers
- AVT 2138 - Engine Fuel \& Fuel Metering
- AVT 2219 - Turbine Engines
- AVT 1132 - Basic Aviation Electricity II
- AVT 1133 - Instruments/Communications
- AVT 1135 - Materials \& Processes
- AVT 1136 - Sheet Metal
- AVT 1213 - Corrosion
- AVT 1214 - Cabin Atmospheric Control
- AVT 1218 - Utility Systems
- AVT 2121 - Assembly \& Rigging
- AVT 2132 - Airframe Electrical Systems
- AVT 2143 - Review \& Recommendation
- AVT 2236 - Non-Metallic Structures
- AVT 2237 - Aircraft Inspections
- AVT 2280 - Introduction to UAS Maintenance
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Arts \& Humanities Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1106 - Physics for Technology
- PHY 1107 - Lab for Physics for Technology


## Aviation Technology, AAS

## Program Code: AVIAT.S.AAS • Credit Hours: 64

## Description

This program leads to an Associate of Applied Science in Aviation Technology. The student, having completed this course work, would have the background and skills to enter the aviation industry or continue towards a bachelor's degree in aviation science (or related field).

## Career Opportunities

Career opportunities are available in airline, corporate and general aviation. Growth in major, regional and low-cost airlines will increase demand for all types of aviation professionals in these companies. In addition, aviation professionals with higher levels of experience and education will have more robust job opportunities. A large number of the positions created in the coming years will be the result of older workers retiring from the industry, prompting the need for new hires.

## Program Requirements

- AVT Any Aviation Course 21 Cr. $\mathbf{H r}(\mathbf{s})$.
- AVT 1105 - Orientation to Aviation
- AVT 1119 - Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1245 - Aviation Law
- AVT 2125 - Developments in Aviation I
- AVT 2146 - Introduction to Airline Operations
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2700 - Aviation Internship
- COM 2206 - Interpersonal Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- MAT 1570 - Analytic Geometry \& Trigonometry
- MET 1131 - Personal Computer Applications for Engineering

Technology

- PHY 1141 - College Physics I


## Aviation Technology/Professional Pilot, AAS

## Program Code: APPAO.S.AAS • Credit Hours: 66-68

## Description

This program leads to an Associate of Applied Science in Aviation Technology/Professional Pilot and is designed for students who want to pursue a career as a professional pilot. The student, having completed this course work, will have the background, skills and FAA credentials to enter the aviation industry as a professional pilot or continue towards obtaining an aviation bachelor's degree. Students may choose fixed wing or helicopter pilot pathways. The curriculum in the Professional Pilot program is rigorous and is designed for full time students to complete in 4 semesters. Students must maintain a minimum of a 2.5 GPA. Enrollment in the flight lab courses is limited and priority will be given to fulltime, degree seeking students. Part time students will be admitted on a space available basis. The student must obtain a Federal Aviation Administration (FAA) 2nd class medical certificate prior to enrolling in any of the flight labs.

In addition to standard tuition fees there are additional course and lab fees for each of the flight labs in the program. The flight lab fees are structured to cover the costs associated with the minimum flying hours required for each FAA certificate. Any additional flying time costs beyond the FAA minimums covered by the flight lab fee must be borne by the student. See the Department for the latest course and flight lab fee costs.

## Career Opportunities

Excellent career opportunities are available in airline, corporate and business aviation. The 2018 Boeing Pilot \& Technician Outlook, a respected industry forecast of personnel demand, projects that 790,000 new civil aviation pilots will be needed to fly and maintain the world fleet over the next 20 years. The forecast is inclusive of the commercial aviation, business aviation, and civil helicopter industries. The demand will stem from a mix of fleet growth, retirements, and attrition. PSA Airlines, a local regional airline, has a continuous need for new pilots and had excellent hiring incentive programs.

## Program Requirements

- AVT 1105- Orientation to Aviation
- AVT 1119 - Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1254 - Flight Simulator Instruction
- AVT 1245 - Aviation Law
- AVT 2146 - Introduction to Airline Operations
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2247 - Aerodynamics \& Flight Mechanics I
- AVT 2258 - Flight Instructor Ground
- AVT 2700 - Aviation Internship
- AVT 1110 - Private Pilot Ground School AND
- AVT 1124 - Private Pilot Flight Lab - Airplane Single Engine AND
- AVT 1170 - Instrument Pilot Ground School AND
- AVT 1224 - Instrument Pilot Flight Lab - Airplane Single Engine AND
- AVT 2250 - Commercial Pilot Ground AND
- AVT 2263 - Commercial Pilot Flight Lab - Airplane Single Engine AND
- AVT 2269 - Flight Instructor Flight Lab - Airplane Single Engine OR
- AVT 1111 - Helicopter Private Pilot Ground AND
- AVT 1126 - Private Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 1171 - Helicopter Instrument Pilot Ground AND
- AVT 1226 - Instrument Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2251 - Helicopter Commercial Pilot Ground AND
- AVT 2265 - Commercial Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2271 - Flight Instructor Flight Lab - Rotorcraft Helicopter
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Arts \& Humanities Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I


## Biotechnology, AAS

## Program Code: BTN.S.AAS • Credit Hours: 61-64

## Description

The Associate of Applied Science in Biotechnology provides a full range of courses to prepare students for entry-level positions in the biotechnology field. The academic curriculum provides a background in historical development of biotechnology, bioethics, safety, reagent preparation, cell culture techniques, protein purification and analysis techniques, microbiology and fermentation methods, molecular biology (DNA) techniques and bioinformatics. With advances in molecular and cellular biology, the biotechnology industry has expanded in scope to include human diagnoses and therapeutics, agricultural and veterinary applications, food production and environmental cleanup.

## Career Opportunities

This degree program prepares graduates to enter the biotechnology workforce as entry-level technicians and conduct a variety of basic and advanced laboratory techniques used in biomedical research.

## Program Requirements

- BIO 1107 - Human Biology
- BIO 1111 - General Biology I AND
- BIO 1211 - General Biology II OR
- BIO 1171 - Principles of Biology I AND
- BIO 1272 - Principles of Biology II
- BIS 1120 - Introduction to Software Applications
- BTN 1110 - Biotechnology \& Bioethics
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- BTN 1130 - Biological Reagents Preparation
- BTN 1140 - Cell Culture
- BTN 2210 - Protein Purification \& Analysis
- BTN 2220 - Microbiology \& Fermentation Methods
- BTN 2230 - Molecular Biology Techniques
- BTN 1201 - Biotechnology Careers OR
- BTN 2700 - Biotechnology Internship
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211-General Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- OT36 Arts \& Humanities Elective $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Business Information Systems, AAS

## Program Code: BIS.S.AAS • Credit Hours: 60-61

## Description

Students in this program will learn advanced features in various software applications and will practice integrating multiple applications to be more productive. The degree includes a strong technology emphasis and sound business foundation with courses in accounting, economics, management and business math. The program will prepare software and information technology staff in all industries to work in teams, support internal and external customers, and use new technologies to maximize business productivity. Students will select one of four concentrations: software applications, computer support, business analytics, or medical office to gain expertise in their area of interest.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Association (CHEA).

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities, to name a few.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 2170 - BIS Capstone
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Software Applications 18-19 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Business Data 18-19 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Medical Office 18-19 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- Computer Support 18-19 Cr. $\mathbf{H r}(\mathbf{s})$.

Software Applications Concentration

- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1400 - Customer Service
- BIS 2270 - Business Information Systems Internship
- BIS or MAN/MRK Elective
- OT36 Natural \& Physical Sciences Elective


## Business Data Concentration

- CIS 1140 - Information Systems Analysis \& Design
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- MAN 2155 - Management Information Systems
- CIS 2265 - Data Visualization with Tableau
- OT36 Natural \& Physical Sciences Elective


## Medical Office Concentration

- BIO 1121 - Human Anatomy \& Physiology I
- BIS 1400 - Customer Service
- BIS 2180 - Medical Office Simulation
- BIS 2270 - Business Information Systems Internship
- HIM 1101 - Medical Terminology
- HIM 1201 - Introductory Medical Office Coding


## Computer Support Concentration

- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1400 - Customer Service
- BIS 2270 - Business Information Systems Internship
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2731 - A+ Hardware \& Software


## Business Management, AAS

## Program Code: GBM.S.AAS • Credit Hours: 60

## Description

This program emphasizes preparation for a wide variety of management-related positions. It is designed to provide a balance in technical business education along with general education courses while providing a considerable choice of electives and alternatives. Opportunities for managers include supervision, office managers, management trainees, assistant managers and owners within a variety of settings, including small and medium-size businesses, corporations, industries, non-profit organizations and governmental agencies.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 2270 - Management Internship OR
- MAN 2275 - Retail Management Capstone OR
- MAN 2279 - Business Management Capstone
- MAN 1107 - Foundations of Business
- MAN 1110 - International Business OR
- MAN 2110 - Introduction to Project Management
- MAN 2150 - Management \& Organizational Behavior
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$. OR
- OT36 Natural and Physical Science Elective 3 Cr. Hr(s).
- Any Course in Catalog 18 Cr. $\mathbf{H r}(\mathbf{s})$.


## Business Management/Digital Marketing, AAS

Program Code: MRK.S.AAS • Credit Hours: 64-65

## Description

Digital Media has disrupted many of the traditional areas of business management. This program provides a broad-based study of digital marketing strategies including customer engagement and consumer behavior, social media, online reputation management, inbound marketing, advertising and branding, graphic design, and website development. Students will have the opportunity to learn new media theories, online consumer psychology and marketing approaches while developing hands on experience with digital marketing tools and techniques. All students will produce a portfolio of their digital marketing projects and benefit from an internship in the digital marketing field.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

According to a recent jobs survey from Adecco's Creative and Marketing Recruiting Division, "Inbound Marketing is on the rise" and many consumers are making their initial approach to a business using mobile media/smartphones, social media, social networks and search engines. Many marketing departments are not fully prepared to address this shift in consumer behavior. $82 \%$ of survey respondents indicated they don't have formal training in digital marketing and frequently learn on the job. Further, $60 \%$ of respondents think their company's digital marketing is ineffective. There is a significant need for a formalized education program in the digital marketing space. Employers are actively searching for candidates that have formalized education and experience in digital marketing. Within the digital marketing space, there are multiple career paths that a student can pursue. If a student has a passion for social media, there are positions available as a social media manager, social media project leader, social media designer, interactive content specialist and customer engagement manager. If a student is interested in broader aspects of digital marketing including website development, search engine optimization and measurement, there are many career options. Potential career paths could include coordinator, specialist, manager and even director roles in e-commerce, new media, website marketing, search engine optimization, web analytics, digital media, online marketing, paid
search, and digital optimization. Digital Marketing is an exciting career path with a wide assortment of career options from which to choose.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2236 - Consumer Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{~ C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts and Humanities $\mathbf{3 C r} \mathbf{~ H r ( s ) . ~}$
- VIS 1140 - Design Processes I
- BIS 1600 - Data Management \& Visualization OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)

OR

- MRK 2250 - Digital Marketing Analytics


## Business Management/Entrepreneurship, AAS

## Program Code: ENTR.S.AAS • Credit Hours: 60

## Description

This area of concentration within the Management degree program prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to general education courses and traditional management courses, the following key areas are emphasized: opportunities for entrepreneurs, financial plan development, marketing plan development and complete business plan development.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Students completing this degree can expect to be prepared to begin their own businesses or to work in larger companies in an entrepreneurial role.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management OR
- MRK 2135 - Digital Marketing
- MRK 2220 - Small Business Marketing
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $3 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- Entrepreneurship Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.

Entrepreneurship Electives

- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2225 - Sales Fundamentals


## Accreditation

## Program Code: SCM.S.AAS • Credit Hours: 60

## Description

The Business Management Supply Chain Management (SCM) concentration provides a broad-based study of organizational strategic plans, resources, roles, responsibilities and functions, while also focusing on management of supply chain activities. This study involves consideration and application of processes to develop coordinated supplier-to-customer systems, including: identifying needs for raw materials, supplies and components; developing specifications; computing quantity requirements; selecting sources and negotiating agreements; acquiring, transporting and storing inventory; managing and maintaining operations; and logistics management.

## Accreditation

This program is fully accredited by the Accreditation Council for Collegiate Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

SCM specialists have opportunities for management positions at all levels in virtually every type of business, throughout small and medium-sized businesses, corporations, industries, nonprofit organizations and government agencies. SCM involves coordinating supplier-to-customer systems, including: identifying the need for materials, computing quantity requirements, selecting sources and negotiating agreements, and logistics and transportation management.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- COM 2225 - Small Group Communication
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- HUM 1130 - Humanity \& the Challenge of Technology
- LAW 1101 - Business Law OR
- LAW 1102 - Consumer Law OR
- LAW 1104 - Employment Law
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2101 - Introduction to Supervision OR
- MAN 2140 - Human Resource Management
- MAN 2110 - Introduction to Project Management OR
- MAN 2155 - Management Information Systems
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2270 - Management Internship OR
- MAN 2279 - Business Management Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 2240 - Six Sigma: Green Belt


## Civil Engineering Technology, AAS

Program Code: CEGT.S.AAS • Credit Hours: 60-64

## Description

In Civil Engineering Technology, students are prepared to work as technicians in the planning, design, construction and operation of the built environment in our civilized world. A strong background in basics of architectural and civil construction and in-depth study of advanced topics such as surveying, construction management and structural analysis prepares students to produce and use construction documents and perform basic design and analysis.

## Accreditation

The Civil Engineering Technology Associate degree (CEGT) is accredited through the Engineering Technology Accreditation Commission of ABET, www.abet.org., www.abet.org

## Program Requirements

- CAT 1161 - Introduction to the Built Environment
- CAT 1211 - Construction Materials Testing
- CAT 1205 - Construction Engineering Technology
- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1401 - Construction Cost Estimating
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2301 - Land Development Design in Civil 3D
- CAT 2401 - Construction Project Management
- CAT 2421 - Soil Mechanics
- CAT 2431 - OSHA Construction Standards
- CAT 2501 - GPS \& GIS for Engineering Technology Professionals
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2701 - Civil Engineering Technology Internship
- CAT 2781 - Civil Engineering Technology Capstone
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 1200 - Technical Mathematics
- PHY 1106 - Physics for Technology OR
- PHY 1141 - College Physics I
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- Construction Elective 5 Cr. $\mathbf{H r}(\mathbf{s})$.
- CAT 1301 - Civil Construction CAD
- CAT 2425 - Introduction to Structural Analysis \& Design
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management


## Community and Public Service, AAS

## Program Code: CPS.S.AAS • Credit Hours: 63-65

## Description

The Community and Public Service Associate of Applied Science degree is for students that are interested in helping those in need to overcome difficulties and improve their lives. This program is built from three core certificates that provide students with the necessary skills and knowledge to be effective in a wide range of social, behavioral and psychological/mental health service settings. Courses in this curriculum will focus on achieving proficiency in the following areas: social work core knowledge, mental health, addiction, values, skills; social work ethics and theory, interviewing and documentation; group/organization and micro-level methodologies; collaboration and advocacy; understanding family dynamics, barriers to self-sufficiency, conflict resolution, cultural and social diversity issues, the relationship between social problems and institutional responses.

## Career Opportunities

Graduates are employable in a variety of social service settings, including area non-profits, behavioral health clinics, Montgomery County Job and Family Services, and Dayton Children's Hospital. Some of these options are available to students if they are willing to complete a degree in Social Work within a certain time frame.

## Program Requirements

- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 1106 - Transition Skills OR
- SCC 1101 - First Year Experience
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective - $\mathbf{3}$ Cr. Hrs.
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2130 - Sociology of Family Violence
- SOC 2205 - Social Problems
- SOC 2226 - Criminology
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work
- OT36 Arts \& Humanities Elective - $\mathbf{3}$ Cr. Hrs.


## Computer Aided Manufacturing/CNC Technology, AAS

Program Code: CAMCT.S.AAS•Credit Hours: 60

## Description

Graduates of the Computer Aided Manufacturing CNC certificate programs are candidates for the completion of this two-year associate degree option. Coursework includes tool and manufacturing processes, computers in engineering technology, quality control, and CNC applications. Facilities and equipment rank among the best in the nation, with more than four million dollars in conventional machining equipment and computer numerical control machines for laboratory use by students

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Careers are available for CNC operators, Programmers and Process Improvement Specialists.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 2204 - Computer Numerical Control Lathe Programming
- CAM 2212 - Computer Assisted Programming
- CAM 2225 - Tool Design
- CAM 2780 - Computer Aided Manufacturing Capstone
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313 - Coordinate Measurement
- MAT 1110 - Math for Technologists
- OT36 Arts and Humanities Elective - $\mathbf{3}$ Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective - 3 Cr. Hr.(s)
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology OR

- ISE 2240 - Six Sigma: Green Belt OR
- CAM 1180 - Welding \& Metal Joining I


## Computer Aided Manufacturing/Precision Machining, AAS

## Program Code: CAMPM.S.AAS • Credit Hours: 60

## Description

Graduates of the CAM precision machining certificate programs are candidates for completion of this two-year associate degree option. More in-depth focus is given to enhancing communication and mathematical skills. A greater development of knowledge in industrial courses is also emphasized, including such areas as tool design, computer numerical control, jig and fixture design, process engineering and basic statistics.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student
Records at studentrecords@sinclair.edu.

## Career Opportunities

Careers are available for entry-level in the precision machining and tool-and-die industries.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 2225 - Tool Design
- CAM 2781 - Precision Machining Capstone
- CAM 2700 - Computer Aided Manufacturing Internship
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists
- ISE 1313 - Coordinate Measurement OR
- ISE 2240 - Six Sigma: Green Belt OR
- CAM 2204 - Computer Numerical Control Lathe Programming OR
- CAM 1180 - Welding \& Metal Joining I
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Computer Information Systems/Network Engineering, AAS

## Program Code: NEEN.S.AAS•Credit Hours: 60

## Description

Students learn Cisco routing protocols, troubleshooting the routing protocols, components, methods and technologies required for network and Internet communications, operation of IP addressing services, network security threats and functions of common security appliances and applications, wireless network standards and components, basic switching concepts, operation of Cisco switches, Virtual Local Area Networks (VLANs) to create logically separate networks. Sinclair is a Regional Cisco Academy.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in IT include entry-level positions such as network administrators, network security analysts and network engineers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1411 - Introduction to Networks
- CIS 1510 - Windows Client Operating System OR
- CIS 2510 - Microsoft Windows Server Operating System OR
- CIS 2731 - A+ Hardware \& Software
- CIS 2165 - Database Management
- CIS 2416 - Routing \& Switching Essentials
- CIS 2421 - Scaling Networks
- CIS 2427 - IoT Fundamentals
- CIS 2640 - Network Security
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Computer Information Systems/Secure System Administration, AAS

## Program Code: NEMA.S.AAS • Credit Hours: 61

## Description

Students are prepared in problem solving, designing and documenting programs, system and network administration, and computer operating systems. Students learn to manage and configure computers, using various operating systems, to provide critical network services to diverse clients in a secure manner. Security concepts that are vendor neutral and applicable to all system types are discussed; those concepts are then applied to specific systems using various operating systems. The overall objective, to securely and efficiently administer networked systems of client and server machines, is emphasized throughout.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Students learn to manage and configure computers, using various operating systems, to provide critical network services to diverse clients in a secure manner. Security concepts that are vendor neutral and applicable to all system types are discussed; those concepts are then applied to specific systems using various operating systems. The overall objective to configure high standards of system and network security is emphasized throughout. Increased recognition of the need for secure systems and networks has provided significantly increased opportunities for those prepared to work in this field.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment OR
- CIS 2650 - Ethical Hacker
- CIS 2640 - Network Security
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience


## Computer Information Systems/Software Development, AAS

## Program Code: SODE.S.AAS • Credit Hours: 62

## Description

Students learn software programming and system design for entry-level software development positions. Students are prepared in logical problem solving, designing and documenting programs, network administration, microcomputer and network operating systems and business applications using current computer languages.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network
administrators, user support specialists, network security analysts and network engineers.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1202 - C++ Software Development
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2207 - Data Structures \& Algorithms OR
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2222 - ASP.NET with C\#
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Art and Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SCC 1101 - First Year Experience


## Computer Information Systems/User Support, AAS

## Program Code: USSU.S.AAS • Credit Hours: 62

## Description

Students learn hardware and software troubleshooting, personal computer and system maintenance, documentation and are prepared in logical problem solving, designing and documenting programs, computer and network operating systems and business applications using current computer languages.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Computer support specialists provide help and advice to people and organizations using computer software or equipment. Some, called computer network support specialists, support information technology (IT) employees within their organization. Others, called computer user support specialists, assist non-IT users who are having computer problems.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1510 - Windows Client Operating System
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- CIS 2427 - IoT Fundamentals
- CIS 2731 - A+ Hardware \& Software
- CIS Computer Information Systems Elective $6 \mathbf{C r} \mathbf{~ H r ( s ) . ~}$
- CIS 2170 - Computer Information Systems Internship OR
- CIS 2178 - Computer Information Systems Capstone
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.

Computer Information Systems Electives

- CIS 1202-C++ Software Development
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2212 - Java Software Development I
- CIS 2240 - Introduction to Mobile Applications
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2550 - Linux Operating System

Computer Information Systems/Web Development, AAS

Program Code: WEDE.S.AAS • Credit Hours: 63

## Description

Students design and develop websites and web applications and are prepared in logical problem solving, designing and documenting programs, microcomputer and network operating systems and business applications using current computer languages. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Today the world wide web dominates much of our daily lives and there is considerable need for those with the skills needed to create, deploy and maintain web content. Nearly every retailer of any size uses dynamic web content to display and sell their products. Other businesses and industries have similar need to host dynamic content regarding their organizations on the web. Those with the skills to manage these sites will have significant opportunities ahead.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 1375 - JavaScript
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II
- CIS 2222 - ASP.NET with C\#
- CIS 2250 - Web Site Development with php
- CIS 2268 - Structured Query Language (SQL) Programming OR
- CIS 2207 - Data Structures \& Algorithms
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{H r}(\mathbf{s})$.


## Construction Management Technology, AAS

## Program Code: CMO.S.AAS • Credit Hours: 60-64

## Description

The Construction Management Technology program helps students develop skills related to managing the construction process including project planning and organization, safety, cost estimating, plan reading, surveying, current construction methods, modern building materials, and Building Information Modeling (BIM). Internship course is required.

## Career Opportunities

Graduates are employed as project managers, estimators, inspectors and craftsmen with residential, commercial and governmental agencies.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1211 - Construction Materials Testing
- CAT 1241 - Building Systems
- CAT 1401 - Construction Cost Estimating
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials
- CAT 2702 - Construction Management Technology Internship
- CAT 2782 - Construction Management Technology Capstone
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- EGV 2351 - LEED Green Associate Exam Preparation
- MAT 1110 - Math for Technologists OR
- MAT 1470 - College Algebra OR
- MAT 1580 - Precalculus OR
- MAT 1200 - Technical Mathematics
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PHY 1100 - Introduction to Physics OR
- PHY 1141 - College Physics I
- Construction Technology Elective $\mathbf{4 C r}$. $\mathbf{H r}(\mathbf{s})$.

Construction Technology Electives

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1141 - Reading Architectural Drawings
- CAT 1205 - Construction Engineering Technology
- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1301 - Civil Construction CAD
- CAT 1701 - Construction Craft Skills/Concrete
- CAT 1721 - Structural Framing Systems
- CAT 1741 - Residential Electrical Systems
- CAT 1761 - Interior \& Exterior Finishes
- CAT 1781 - Construction Project
- CAT 1810 - Construction Techniques I
- CAT 1820 - Construction Techniques II
- CAT 1830 - Construction Techniques III
- CAT 1840 - Construction Techniques IV
- CAT 2201 - Architectural Visualization
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2581 - Legal Principles for Surveyors
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- MAT 2270 - Calculus \& Analytic Geometry I


## Correctional Rehabilitation, AAS

## Program Code: CR.S.AAS • Credit Hours: 60

## Description

The Correctional Rehabilitation Associate of Applied Science will prepare students for a career assisting returning citizens in navigating the transition from incarceration to re-entry into the community. This program provides a broad-based study on navigating the criminal justice system as well as how to support someone in transition with their personal and professional goals. Upon completion, graduates will be qualified for careers within correctional rehabilitation that support individuals leaving incarceration and transitioning into their communities.

## Career Opportunities

Graduates of this program may find career opportunities in areas of reentry support such as rehabilitation and corrections, reentry services, community corrections, job and family services, and non-profit re-entry programming.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1106 - Transition Skills
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective - 3 Cr. Hr.(s)
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology
- OT36 Arts and Humanities 3 Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr.(s)


## Criminal Justice Science/Corrections, AAS

## Program Code: CJCO.S.AAS • Credit Hours: 60

## Description

This program is designed to combine the criminal justice concepts, theories and laws with practical application techniques and modern technology skills to prepare the Criminal Justice Science student for productive employment in corrections. The corrections track maintains cutting-edge curriculum that enhances critical thinking, written and oral communications, teamwork, leadership and assessment. The curriculum includes general education requirements, theory and practice courses and educational requirements in ethics, law and the current best practices in the field of criminal justice.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at student records@sinclair.edu.

## Career Opportunities

Employment is available in the corrections field as correctional officers, security guards, county probation and parole officers, positions in commercial, school, and private security organizations, and correctional treatment specialists.

## Program Requirements

- BIO 1107 - Human Biology OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).
- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer

Academy

- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2270 - Criminal Justice Science Internship OR
- CJS 2295 - Criminal Justice Science Seminar
- COM 2245 - Intercultural Communication
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100-General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology


## Criminal Justice Science/Law Enforcement, AAS

## Program Code: CJLE.S.AAS • Credit Hours: 63

## Description

The Associate of Applied Science Degree in Criminal Justice prepares entry-level professionals from diverse backgrounds in theoretical foundations, knowledge, skills, and practices of criminal justice operations. This study enables students to develop rational decisions and informed responses to challenges facing law enforcement and criminal justice professionals today.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice/law enforcement including those in court systems, court administration, patrol, victim services, investigation, and probation/parole.

## Program Requirements

- BIO 1107 - Human Biology OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 1155 - Homeland Security Issues \& Administration
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2205 - Introduction to Criminal Investigation \& Forensic Science
- CJS 2209 - Computer Crime
- CJS 2270 - Criminal Justice Science Internship OR
- CJS 2295 - Criminal Justice Science Seminar
- COM 2245 - Intercultural Communication
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology


## Culinary Entrepreneurship, AAS

## Program Code: CENT.S.AAS•Credit Hours: 65

## Description

The Associate of Applied Science degree in Culinary Entrepreneurship has the right combination of Culinary, Business, and Entrepreneurship elements to meet the needs of motivated individuals that aspire to start their own restaurants and other food related businesses, to employ others, and to develop their brand recognition. Potential applications include development and oversight of businesses related to food operations in new restaurants, kiosks, food trucks, and other business models. The Culinary Entrepreneurship degree program at Sinclair College offers specialized credentials and provides content area knowledge that will allow graduates to realize their dreams of business ownership in the area of food production.

## Career Opportunities

An individual majoring in Culinary Entrepreneurship can explore the following career opportunities:
--Open Your Own Restaurant
--Start a Food Truck
--Go Virtual by considering owning Ghost Kitchen
--Become a Caterer
--Become Food Stylist
--Become a Food Consultant
--Mix Art and Science and become a Recipe Developer
--Become a Food Influencer
--Become the next TIK TOK sensation

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1129 - Restaurant Desserts
- HMT 2203 - Street Foods \& Food Trucks
- HMT 2215 - Hospitality Cost Controls
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- MRK 2220 - Small Business Marketing
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).


## Cyber Investigation Technology, AAS

## Program Code: CYIT.S.AAS • Credit Hours: 61

## Description

The Cyber Investigation Technology degree will prepare students for careers in the areas of computer network protection, managing networks and operating systems, and IT criminal investigation, which includes evidence procedures and computer forensics. The degree incorporates preparation for industry-recognized certifications, articulated credit for Law Enforcement and Corrections entities, and transfer students for four-year degree transfer opportunities.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This degree is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Job titles include but are not limited to: Intelligence Analyst, IT Specialist (Government Breakout Codes 2210), Systems Administrator, Network Engineer, Information System Security Manager, Cyber Security Incident Response Specialist and Private Investigator.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 2165 - Database Management
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment
- CIS 2640 - Network Security
- CIS 2731 - A+ Hardware \& Software
- CIS 2808 - Introduction to Computer Forensics
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2209 - Computer Crime
- CJS 2295 - Criminal Justice Science Seminar
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- MAN 2150 - Management \& Organizational Behavior


## Data Analytics, AAS

## Program Code: DATA.S.AAS • Credit Hours: 65

## Description

Students will be prepared for entry-level data analytics positions requiring knowledge, setup and usage of business intelligence and data analysis solutions. Students will have the ability to extract, curate, wrangle, and visualize data in a way that is meaningful to a variety of organizations. Course work will include database concepts, data modeling, Structured Query Language (SQL), data analysis and visualization, data mining tools, mathematical and statistical techniques, project management and systems analysis. Emphasis is placed on strong communication skills necessary to interact with key stakeholders to achieve their desired objectives.

## Career Opportunities

Opportunities include positions such as Data Engineer, Data Analyst, Business Intelligence Analyst, Data Manager, Visualization Analyst, and Business Systems Analyst.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- MAT 1455 - Introduction to Data Science
- MAT 2170 - Business Statistics I
- MAT 2180 - Business Statistics II
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Dental Hygiene, AAS

## Program Code: DEH.S.AAS • Credit Hours: 69

## Description

Working as part of a dental team, dental hygienists treat patients needing non-surgical periodontal therapy and radiographs, apply preventive agents, provide intra- and extra-oral exams and oral hygiene instructions. Registered dental hygienists work in private dental offices, public health settings, and in higher education. The Dental Hygiene program is designed to be completed in five (5) semesters on a fulltime basis when the student begins the technical portion of the program. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. In order to be invited into the Dental Hygiene Program all students must have a GPA of 2.7 with an overall TEAS score of 60 and a score on the sciences portion of the test of 50 . You have three opportunities to successfully take the TEAS. For any students applying under the Accelerated Admission for Academic Achievement (AAAA) you must have a GPA of 3.0 with an overall TEAS score of 65 and a science score of 55 . A student may take the TEAS test two times for consideration. In addition, you must earn an or A or B in all required biology and chemistry courses. Complete CHE 1111/CHE 1151 (Introduction to Chemistry I) or provide proof of High School chemistry with a C or better within past 5 years to the Dental Health Sciences Department.

## Accreditation

The program in Dental Hygiene at Sinclair Community College is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of Approval (without reporting requirements). The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (800) 621-8099 or (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611-2678.

## Career Opportunities

Career options may vary according to state practice act restrictions. Dental hygienists have a variety of career opportunities in a wide range of employment settings, including private practice, hospitals, HMO's, community health programs, long-term care facilities, school systems, dental product research, marketing and sales, military bases, universities and research centers.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- DEH 1102 - Introduction to Dental Hygiene AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology
- DEH 1102 - Introduction to Dental Hygiene
- DEH 1202 - Head, Neck \& Dental Anatomy
- DEH 1203 - Lab for Head, Neck \& Dental Anatomy
- DEH 1204 - Preclinical Dental Hygiene I
- DEH 1205 - Lab for Preclinical Dental Hygiene I
- DEH 1206 - Nutrition \& Oral Health
- DEH 1302 - Preclinical Dental Hygiene II
- DEH 1303 - Lab for Preclinical Dental Hygiene II
- DEH 1304 - Oral Histology \& Embryology
- DEH 1305 - Medical Emergencies in Dental Practice
- DEH 1306 - General \& Oral Pathology
- DEH 1308 - Dental Radiology
- DEH 1309 - Lab for Dental Radiology
- DEH 2402 - Clinical Dental Hygiene I
- DEH 2403 - Dental Hygiene Clinic I
- DEH 2502 - Pharmacology in the Dental Practice
- DEH 2503 - Pain Control in the Dental Practice
- DEH 2504 - Dental Hygiene Research
- DEH 2506 - Dental Materials
- DEH 2507 - Lab for Dental Materials
- DEH 2508 - Clinical Dental Hygiene II
- DEH 2509 - Dental Hygiene Clinic II
- DEH 2601 - Community Dental Health
- DEH 2602 - Clinical Dental Hygiene III
- DEH 2603 - Dental Hygiene Clinic III
- DEH 2604 - Dental Hygiene Practice
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology


## Digital Media Design, AAS

## Program Code: DMD.S.AAS • Credit Hours: 62-65

## Description

The Associate of Applied Science degree in Digital Media Design will prepare students for careers and transfer degrees in digital media. In this interdisciplinary program, students select a pathway specific to their interest -- Video Production or Web Design. The program is creative, fast paced, and in demand by most businesses. Students will
develop the knowledge and technical skills necessary to produce and design quality videos or web applications. Creativity, problem-solving and the design process are stressed. Advanced computer skills, portfolio development and job-seeking strategies are also incorporated into the curriculum.

## Career Opportunities

Graduates from this program will be able to obtain positions in the field of video production (television, internet, live broadcasts, home or other purposes) or web design (web designer and coding, user experience/user interface design, search engine optimization, and motion design).

## Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods OR
- ART 2235 - History of Photography
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1101 - Introduction to Sociology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 2130 - Motion Design
- VIS 2260 - Design Portfolio
- Video Production Pathway 28-30 Cr. $\mathrm{Hr}(\mathbf{s})$. OR
- Web Design Pathway 28-30 Cr. $\mathbf{H r}(\mathbf{s})$.

Video Production Pathway

- AVT 1103 - Remote Pilot Ground School
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design
- VIS 2180 - Video Principles
- VIS 2190 - Video Applications I
- VIS 2200 - Video Applications II

Video Production Pathway Electives
Choose one course for Video Production Pathway elective:

- ART 2265 - Digital Color Photography I
- ENG 2256 - Fiction Writing
- MRK 2135 - Digital Marketing

Web Design Pathway

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design
- VIS 2140 - Web Principles
- VIS 2150 - Web Applications
- VIS 2170 - Web Content Management

Web Design Pathway Electives

Choose one course for Web Design Pathway elective:

- ART 2265 - Digital Color Photography I
- CIS 1375 - JavaScript
- IND 1240 - Color Theory
- MRK 2135 - Digital Marketing
- VIS 1420 - Video Production


## Early Childhood Education, AAS

## Program Code: ECE.S.AAS • Credit Hours: 63

## Description

This program provides the knowledge, skills and competencies important to an entry-level teacher working with, or planning to work with, young children. The program includes the academic preparation required by the Ohio Department of Education to meet PreKindergarten Associate Teacher Licensure standards.
Students interested in completing this degree program must have a full criminal background investigation completed before enrolling in the final practicum course. A grade of " C " or better is required in all courses.

## Career Opportunities

Graduates may work as pre-kindergarten associate licensed teachers, child care center directors, infant-toddler teachers, and paraprofessionals in public schools or as school age child care coordinators.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ECE 1100 - Introduction to Early Childhood Education
- ECE 1101 - Introductory Child Development
- ECE 1200 - Observation \& Assessment
- ECE 1201 - Curriculum \& Planning
- ECE 1202 - Healthy \& Safe Environments
- ECE 2103 - Literacy, Art \& Music
- ECE 2104 - Math, Science \& Social Studies
- ECE 2105 - Professionalism in Early Childhood Education
- ECE 2200 - Families, Communities \& Schools
- ECE 2201 - Guidance of Young Children
- ECE 2302 - Infant \& Toddler Curriculum
- ECE 2301 - Early Childhood Education Practicum OR
- ECE 2303 - Early Childhood Education Practicum Part 1 AND
- ECE 2304 - Early Childhood Education Practicum Part 2
- EDU 1100 - Introduction to Education
- EDU 1105 - Individuals with Exceptionalities
- ENG 1101 - English Composition I
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).
- PSY 1100-General Psychology
- PSY 2242 - Educational Psychology


## Electrical Construction Management, AAS

## Program Code: ECM.S.AAS • Credit Hours 60-61

## Description

This Associate of Applied Science (AAS) degree is designed for electrical apprenticeship skilled trades students, providing supervisory, management and leadership skills. Students already in programs such as NCCER, IEC, and JATC can take this AAS concurrently with their respective apprenticeship program. This degree will fulfill the needs of the electrical construction industry by providing an associate degree pathway to electrical construction management while simultaneously completing an approved apprenticeship program. Provides the necessary training for journeyman electricians to gain necessary knowledge for job site leadership positions such as electrical foreman, maintenance technician supervisor, manufacturing industry electrician, and to start/run their own contracting business.

## Career Opportunities

Careers might include electrical construction project manager, electrical superintendent, lead electrician, maintenance supervisor, estimating manager, or small business owner.

## Prerequisites

## - Approval of Department

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CAT 1431 - OSHA Construction Standards 10 Hour OR
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- EET 1181 - Electrical Construction I AND
- EET 1182 - Electrical Construction II AND
- EET 1183 - Electrical Construction III AND
- EET 1184 - Electrical Construction IV OR
- EET 1120 - Introduction to DC \& AC Circuits AND
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2110 - Introduction to Project Management
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts and Humanities 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective\  $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Electro-Mechanical Engineering Technology, AAS

## Program Code: EMET.S.AAS • Credit Hours: 63-64

## Description

This program prepares students for a career in Mechatronics by combining knowledge of mechanical technology with knowledge of electrical and electronic circuits. The program prepares students to operate, test, and maintain unmanned, automated, robotic, or electromechanical equipment. The degree includes traditional classroom instruction, and hands-on laboratory experiences every semester.

## Career Opportunities

Prepares students for a career in advanced manufacturing, defense industry, semi-conductor manufacturing sector, high tech logistics/warehousing, consulting, technical sales, or related field.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 1198 - Digital Technology
- EET 2281 - Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2278 - Automation \& Control Capstone OR
- EGR 2279 - Mechatronics Capstone
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1131 - Personal Computer Applications for Engineering

Technology

- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 1301 - SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process
- MET 2281 - Engineering Technology Professional Practice
- OT36 Natural and Physical Sciences Elective 4 Cr. Hr.(s).
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr.(s)


## Electroneurodiagnostic Technology, AAS

## Program Code: END.S.AAS • Credit Hours: 64-65

## Description

The associate degree program in Electroneurodiagnostic Technology prepares competent entry-level Neurodiagnostic Technologists, specializing in Electroencelphagrams (EEG) with additional expertise in the following additional areas: Evoked Potentials (EP); Intraoperative Neuromonitoring (IONM); Nerve Conduction Students (NCS) and Polysomnography (PSG), in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Electroneurodiagnostic is the allied health care profession that records, monitors, and analyzes nervous system functions to promote the effective treatment of pathologic conditions. Technologists record electrical activity arising from the brain, spinal cord, peripheral nerves, somatosensory or motor nerve systems using a variety of techniques and instruments. Technologists prepare data and documentation for interpretation by a physician. As part of the program, the students will complete a non-paid, supervised health-related practicum in a medical setting. A grade of " C " or higher is required in all program courses to remain in the program.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College's Electroneurodiagnostic Technology program is accredited by the Commission on Accreditation of Allied Health Education Program (CAAHEP:
https://www.caahep.org/Home.aspx). The Committee on Accreditation for Education in Neurodiagnostic Technology (CoA-NDT) and CAAHEP's board of Directors recognized the programs substantial compliance with the nationally established accreditation standards. Commission on Accreditation of Allied Health Education Programs, 9355 113th St. N, \#7709 Seminole, FL 33775 Phone: 727-210-2350 Fax: 727-210-2354

## Career Opportunities

Employment may be found in hospitals, out-patient clinics and surgical centers.

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- END 1101 - Introduction to Electroneurodiagnostic Technology AND
- MAT 1470 - College Algebra OR
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics AND
- Approval of Department AND
- GPA of 2.0 and TEAS Exam


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1110 - Principles of Electrocardiography
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I OR
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- END 1101 - Introduction to Electroneurodiagnostic Technology
- END 1102 - Introduction to Electroencephalography (EEG)
- END 1182 - Lab for Intro to EEG
- END 1250 - Intermediate Electroencephalography (EEG)
- END 1260 - Basic Evoked Potentials
- END 1285 - Lab for Intermediate EEG
- END 1286 - Lab for Basic Evoked Potentials
- END 1901 - Seminar for END Practicum I
- END 1991 - Practicum Experience I for END
- END 2350 - Intraoperative Monitoring for Electroneurodiagnostic Technologists
- END 2360 - Neonatal/Pediatric Electroneurodiagnostic
- END 2386 - Lab for Neonatal/Pediatric EEG
- END 2450 - Nerve Conduction Studies
- END 2460 - Neurophysiology of Electroencephalography/Sleep Disorders
- END 2485 - Lab for Nerve Conduction Studies
- END 2550 - Fundamentals of Polysomnography
- END 2585 - Lab for Polysomnography
- END 2902 - Seminar for END Practicum II
- END 2903 - Seminar for END Practicum III
- END 2990 - Electroneurodiagnostic Capstone
- END 2992 - END Practicum II
- END 2993 - END Practicum III
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- PSY 1100 - General Psychology


## Electronics Engineering Technology, AAS

Program Code: EET.S.AAS • Credit Hours: 60-62

## Description

The Electronics Engineering Technology (EET) program provides students with exciting opportunities to put engineering technology concepts into practice. The curriculum balances instruction in theory with hands-on laboratory applications. A strong background in basics and in-depth study of advanced topics gives students careers in diversified areas, such as digital systems, microcomputers, programmable logic controllers, and analog systems. The program has modern state-of-the-art equipped laboratories and a highly qualified faculty. Those who wish to further their studies are well prepared for entry into the best four-year electronics engineering technology programs

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Accredited by Engineering Technology Accreditation Commission of ABET, Inc., www.abet.org

## Career Opportunities

Prepares graduates for careers in electronics technician troubleshooting with testing equipment and assisting engineers with design and fabrication.

## Program Requirements

- COM 2211 - Effective Public Speaking
- EET Electronics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- EET 1116 - Electronics Schematics \& Fabrication
- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EET 2278 - Electronics Project Capstone
- EET 2281 - Programmable Logic Controllers
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1101 - English Composition I
- MAT 1580 - Precalculus OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry
- MET 2711 - Ethics for Engineering Technology Professionals
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I

Electronics Electives

- EET 2157 - Radio Frequency Identification (RFID) Technology
- EET 2257 - Radio Frequency Identification (RFID) Capstone
- EET 2270 - Electronics Engineering Technology Internship
- EET 2282 - Advanced Programmable Logic Controllers
- PHY 1142 - College Physics II


## Emergency Medical Services, AAS

## Program Code: EMSVS.S.AAS • Credit Hours: 60-61

## Description

The Emergency Medical Services (EMS) degree is designed to augment the skills of the practicing paramedic. Paramedics are challenged with a variety of courses to increase their skill sets in areas of EMS management and out-of-hospital critical care medicine Students will gain experience from currently practicing paramedics, fire fighters and managers. This degree allows students to capitalize on their paramedic education, positioning themselves for advancement within the fire service. A grade of " C " or better is required in all technical-level courses. Interested students should contact the EMS offices at 937-512-5338 or contact an academic advisor.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The EMT certification course meets the Ohio Division of EMS accreditation standards. The paramedic certification course meets the Ohio Division of EMS and CAAHEP accreditation standards.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidate's state licensures/ certifications - not whether the candidate is degreed. The associate degree can provide students with knowledge and skills needed to advance within an EMS career.

Program Prerequisite(s)

- EMS 1150 - Emergency Medical Technician: Lecture AND
- EMS 1155 - Laboratory for Emergency Medical Technician

Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for Emergency Medical Services Provider
- EMS 2105 - Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175 - Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- EMS 2300 - Critical Care Paramedic 1 OR
- EMS 2305 - Critical Care Paramedic 2 OR
- EMS 2310 - EMS Management 1 OR
- EMS 2315 - EMS Management 2
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology


## Emergency Medical Services/Fire Science, AAS

## Program Code: EMSFO.S.AAS • Credit Hours: 64-65

## Description

The Emergency Medical Services (EMS) Fire Science option is designed to augment the skills of the practicing paramedic. Paramedics are challenged with a variety of courses to increase their skill sets in fire technical areas. Students will gain experience from currently practicing paramedics, fire fighters and managers. This degree allows students to capitalize on their paramedic education, positioning themselves for advancement within the fire service. A grade of " C " or better is required in all technical-level courses. Interested students should contact the EMS offices at (937) 512-5338 or contact an academic adviser.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

The certificates within the degree meet accreditation standards. The EMT certificate meets the Ohio Division of EMS accreditation standards. The Paramedic certificate meets the Ohio Division of EMS and the CAAHEP accreditation standards. The professional firefighting program is in compliance with all appropriate state laws/ rules.

## Career Opportunities

Careers with the fire service are beginning to change. Most departments will not require a degree for an entry level position. But departments are beginning to acknowledge the degree and give some preference for those entry level applicants with degrees. It is clear that to advance or get promotions with the fire services, degrees are needed.

## Program Prerequisite(s)

- EMS 1150 - Emergency Medical Technician: Lecture AND
- EMS 1155 - Laboratory for Emergency Medical Technician


## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for Emergency Medical Services Provider
- EMS 2105 - Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175 - Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- ENG 1101 - English Composition I
- PSY 1100 - General Psychology
- COM 2211 - Effective Public Speaking OR
- COM 2206 - Interpersonal Communication
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{~ C r} . \mathbf{H r}(\mathbf{s})$.
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Fire Science Technology/Fire Administration, AAS

Program Code: FAO.S.AAS • Credit Hours: 63

## Description

This program provides the education and skills needed by the fire service professional to function in the emergency services field. Courses include administration, inspection, investigation, building construction, fire hydraulics and water suppression systems. Graduates are prepared to enter the workforce as firefighters, fire officers, investigators, inspectors, instructors, or continue their education in fire science or public administration.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Firefighter I, II, Fire Safety Inspector, and Fire Instructor Classes are certification courses through the Ohio Department of Public Safety. Also Firefighter I and II, Fire Instructor I and Fire Officer I and II are accredited by the National Board on Fire Service Professional Qualifications. We are currently in the process of extending ProBoard certification to Fire Instructor II, Fire Officer III and Fire Officer IV.

## Career Opportunities

In the next decade a majority of career fire service professionals with 25 plus years' service will be retiring under the State of Ohio "Deferred Retirement Option Plan (DROP)". Replacement employees will be needed to fill openings not only for entry-level positions, but promotions in the officer ranks as well.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- FST 1102 - Firefighter I
- FST 1103 - Firefighter II Transition
- FST 1120 - Fire Safety Inspector
- FST 1125 - Fire Investigation I
- FST 1403 - Live Fire Instructor
- FST 1442 - Emergency Vehicle Operator
- FST 2209 - Fire Service Instructor
- FST 2251 - Fire Officer I
- FST 2252 - Fire Officer II
- FST 2253 - Fire Officer III
- FST 2254 - Fire Officer IV
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- PSY 1100 - General Psychology
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural \& Physical Sciences Elective $3 \mathbf{C r} . \operatorname{Hr}(\mathbf{s})$.

Program Code: GST.S.AAS • Credit Hours: 61-63

## Description

The Associate of Applied Science degree in Geospatial Technologies will prepare students for careers and transfer degrees in geographical information systems (GIS). In this interdisciplinary program, students select a pathway specific to their interest - GIS Analyst, GIS Programming Specialist, or Aerial Sensing Data Analyst. In this profession, graduates are responsible for collecting geospatial data, producing maps, analyzing spatial data, coordinating GIS projects, providing technical expertise to clients or users, and providing programming and software development expertise.

## Career Opportunities

Approximately $80 \%$ of all data have a spatial or location-based component. The geospatial industry and market for it continue to expand at a phenomenal rate. The latest Dept. of Labor statistics show more than 850,000 current geospatial workers with an additional 350,000 needed by 2018 . Professionals in GIS are needed in organizations of all sizes and in almost every industry, including, agriculture, health care, retail trade, urban planning, law enforcement, defense and intelligence, natural resources, utilities, marketing,unmanned aerial systems and engineering among others.

## Program Requirements

- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- GEO 1101 - Global Forces, Local Diversity
- GEO 1102 - Earth's Physical Environment OR
- GEO 1300 - Introduction to Weather \& Climate
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1209 - Map Design \& Visualization
- GEO 1212 - Geospatial Data Acquisition \& Management
- GEO 2210 - Advanced Spatial Analysis
- GEO 2600 - Geospatial Technology Capstone OR
- GEO 2700 - Geospatial Technology Internship
- MAT 1450 - Introductory Statistics
- MAT 1470 - College Algebra
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- SCC 1101 - First Year Experience
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. Hr(s). OR
- OT36 Natural \& Physical Sciences Elective 3 Cr. Hr(s).
- GIS Aerial Data Sensing Analyst Pathway 6-8 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- GIS Analyst Pathway 6-8 Cr. Hr(s). OR
- GIS Programming Specialist Pathway 6-8 Cr. $\mathbf{H r}(\mathbf{s})$.
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis
- AVT 1123 - Acoustic \& CBRNE Data Analysis
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization

GIS Analyst Pathway

- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1215 - Introduction to Remotely Sensed Imagery OR
- EET 1121 - UAS Remote Sensing \& Analysis AND
- EET 1158 - Aerospace Spatial Visualization

GIS Programming Specialist Pathway

- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 1350 - Web Site Development with HTML \& CSS


## Health Information Management, AAS

## Program Code: HIM.S.AAS • Credit Hours: 62

## Description

Health Information Management (HIM) professionals are experts in the field of managing and protecting patient health information, administering computer information systems, and coding the diagnoses and procedures for health care services provided to patients in accordance with medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system.

The Health Information Management program is designed to be completed in five (5) semesters on a full-time basis. Students preferring to complete on a part-time basis may take longer than five sequential semesters. The degree program consists of open-enrollment courses and program-specific courses with limited enrollment. The open-enrollment courses may be taken prior to entry into the limitedenrollment courses. Most second-year HIM courses are limitedenrollment courses. All courses in the program are available online. To qualify for entry to limited-enrollment courses, please see the Applicant Information packet located on the HIM program webpage. A minimum cumulative GPA of 2.0 and completion of prerequisite courses are required. A grade of " C " or higher is required in all program courses.

The curriculum includes a professional practice experience (PPE) that occurs virtually with HIM professionals. Students work online with professionals to experience HIM processes, projects, and "a day in the life". Generally, these experiences occur online during daytime business hours, however, many sessions are recorded and can be accomplished asynchronously.
.Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Health Information Management program is fully accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Upon successful completion of the HIM program, students are eligible to take the national certification exam to obtain the Registered Health Information Technician (RHIT) credential.

## Career Opportunities

Employment prospects continue to be excellent throughout the nation. HIM graduates work in hospitals, clinics, ambulatory care centers, skilled nursing facilities, rehabilitation centers, long term care facilities, mental healthcare and psychiatric facilities, home healthcare agencies, hospice facilities, physician offices, managed healthcare plans, insurance companies, law firms, colleges and universities, state and federal agencies, consulting firms, medical research institutions, and companies that market health information products and services.

## Program Prerequisite(s)

- BIO 1121 - Human Anatomy \& Physiology I AND
- HIM 1101 - Medical Terminology


## Program Requirements

- ALH 1140 - Fundamentals of Disease Processes
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1221 - Specialized Computer Applications for Health

Information Management

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 1217 - Alternative Health Records \& Registries
- HIM 2110 - Ambulatory Coding
- HIM 2144 - Quality Improvement, Statistics \& Research
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2211 - Inpatient Coding
- HIM 2233 - Healthcare Information Systems
- HIM 2252 - Professional Practice Experience
- HIM 2278 - Health Information Management Capstone
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.


## Health Sciences, AAS

Program Code: HS.S.AAS • Credit Hours: 64-68

## Description

The associate of applied science degree in Health Sciences provides students with a general degree in the health science field. Students with technical certificates or college credits in allied health courses can apply their credits toward the AAS. Graduates will be able to enter a health-related field, or continue their education toward a Bachelor's of Science degree at a four-year university.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SCC 1101 - First Year Experience
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics OR
- MAT 1470 - College Algebra
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I OR
- BIO 1121 - Human Anatomy \& Physiology I AND
- BIO 1222 - Human Anatomy \& Physiology II OR
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- Health Sciences Technical Elective 27 Cr. Hr(s).

Health Sciences Technical Electives

- AGR 1160 - Introduction to Agriculture Science
- ALH 1103-Test Taking Strategies
- ALH 1105- Overview of Holistic Health
- ALH 1110 - Principles of Electrocardiography
- ALH 1113 - Clinical Phlebotomy
- ALH 1114 - Clinical Phlebotomy Practice
- ALH 1120 - Nurse Aide Training
- ALH 1121 - Acute Care Nurse Aide
- ALH 1122 - Pharmacy Technician I
- ALH 1123 - Pharmacy Technician II
- ALH 1124 - Pharmacy Technician Directed Practice
- ALH 1130 - Basic Life Support Training for Healthcare Provider
- ALH 1132 - Heartsaver First Aid, CPR \& AED
- ALH 1140 - Fundamentals of Disease Processes
- ALH 1183 - Pharmacy Technician Lab
- ALH 1250 - Health Science Practicum
- ALH 2201 - Survey of Drug Therapy
- ALH 2202 - General Pharmacology
- ALH 2220 - Pathophysiology
- BIO 1107 - Human Biology
- BIO 1111 - General Biology I
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1171 - Principles of Biology I
- BIO 1211 - General Biology II
- BIO 1222 - Human Anatomy \& Physiology II
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1272 - Principles of Biology II
- BIO 2205 - Microbiology
- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1221 - Specialized Computer Applications for Health Information Management
- BIS 1400 - Customer Service
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- CHE 1111 - Introduction to Chemistry I
- CHE 1121 - Introduction to Chemistry II
- CHE 1211 - General Chemistry I
- CHE 1221 - General Chemistry II
- CHE 2111 - Organic Chemistry I
- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 2165 - Database Management
- CIS 2269 - Data Analytics Theory \& Solutions
- CLT 1200 - Introduction to Clinical Laboratory
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2225 - Small Group Communication
- DAS 1102 - Introduction to Dental Assisting Terminology
- DAS 1104 - Dental Assisting Techniques \& Materials I
- DAS 1108 - Dental Assisting Office Management
- DAS 1204 - Dental Assisting Techniques \& Materials II
- DAS 1206 - Dental Assisting Radiography
- DEH 1102 - Introduction to Dental Hygiene
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 1111 - Nutrition for Health \& Fitness
- DIT 1210 - Medical Terminology for Dietetics
- DIT 1525 - Human Nutrition
- DIT 1630 - Nutrition Through the Lifecycle
- DIT 1635 - Community Nutrition
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2180 - Medical Nutrition Therapy for Dietary Managers
- DIT 2190 - Dietary Managers Nutrition Clinical
- DIT 2240 - Motivational Interviewing, Nutrition Counseling \&

Communication

- DIT 2305 - Food, Culture \& Cuisine
- DIT 2310 - Lab for Food, Culture \& Cuisine
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2735 - Foodservice Retail Business Management \& MidProgram Assessment
- DIT 2740 - Retail Business Management Directed Practicum
- EFD 1102 - Dental Anatomy for Dental Auxiliaries
- EFD 1202 - Expanded Functions for Dental Auxiliaries I
- EFD 1203 - Lab for Expanded Functions for Dental Auxiliaries I
- EFD 1302 - Expanded Functions for Dental Auxiliaries II
- EFD 1303 - Lab for Expanded Functions for Dental Auxiliaries II
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- END 1101 - Introduction to Electroneurodiagnostic Technology
- END 1891 - Polysomnography Practicum
- END 2460 - Neurophysiology of Electroencephalography/Sleep

Disorders

- END 2550 - Fundamentals of Polysomnography
- ENS 1116 - Exercise Science \& Health Promotion
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 1214 - Personal \& Community Health Behavior
- ENS 2318 - Fitness Assessment \& Exercise Prescription
- ENS 2417 - Methods of Teaching
- ENS 2420 - Concepts of Lifestyle Coaching
- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1160 - Medical Office Coding Concepts
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 1217 - Alternative Health Records \& Registries
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2233 - Healthcare Information Systems
- HIM 2262 - Advanced Medical Office Coding
- HMT 1101 - Basic Culinary Skills
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- MAN 1107 - Foundations of Business
- MAS 1110 - Administrative Medical Assisting
- MAS 1130 - Reimbursement Specialist Practicum
- MAS 2210 - Medical Billing Specialist
- MAT 1120 - Business Mathematics
- MAT 1130 - Mathematics in Health Sciences
- MAT 1445 - Quantitative Reasoning
- MAT 1450 - Introductory Statistics
- MAT 1460 - Mathematics for Business Analysis
- MAT 1470 - College Algebra
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 1202 - Motivational Interviewing
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2137 - Treatment Techniques in Substance Use Disorders
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2235 - Family Dynamics of Addiction
- MHT 2253 - Issues in Chemical Dependency
- NSG 1111 - Introduction to Nursing
- NSG 1200 - Introduction to Nursing
- OTA 1111 - Introduction to Occupational Therapy Assistant
- PHI 2206 - Introduction to Ethics
- PHY 1106 - Physics for Technology
- PSY 1160 - Black Psychology
- PSY 2200 - Lifespan Human Development
- PSY 2217 - Abnormal Psychology
- PTA 1000 - Introduction to Physical Therapy
- RAT 1101 - Introduction to Radiologic Technology
- RAT 2640 - Computed Tomography Practicum
- RAT 2641 - Principles of Computed Tomography
- RAT 2643 - Principles of Magnetic Resonance Imaging
- RAT 2644 - Applications of Magnetic Resonance Imaging
- RAT 2645 - Magnetic Resonance Imaging Practicum
- RAT 2647 - Principles of Mammography
- RAT 2649 - Mammography Practicum
- RET 1100 - Introduction to Respiratory Care
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2205 - Social Problems
- SOC 2215 - Race \& Ethnicity
- SUT 1100 - Sterile Processing I
- SUT 1101 - Tissue Banking I
- SUT 1107 - Lab for Tissue Banking I
- SUT 1200 - Sterile Processing II
- SUT 2101 - Tissue Banking II
- SUT 2107 - Practicum for Tissue Banking II
- SWK 2207 - Anti-Oppressive Social Work
- VET 1102 - Introduction to Veterinary Technology I

VET 1120 - Introduction to Large Animal Sciences: Handling \& Husbandry

- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2220 - Principles of Large Animal Reproduction
- VET 2225 - Principles of Large Animal Nutrition


## Heating, Ventilating, Air Conditioning \& Refrigeration (HVACR) Technology, AAS

## Program Code: HVACR.S.AAS • Credit Hours: 60

## Description

This degree is designed for entry-level students pursuing careers in the HVAC-R industries, as well as experienced technicians in need of upgrade training. The program focuses on the basic operating principles of commercial and industrial HVAC systems, allowing one to pursue careers in sales, service, facilities operation, project management, laboratory technician, building automation, and even design. These principles are presented through lecture and laboratory exercises in a step-by-step fashion by addressing refrigeration, heating, distribution, filtration and control as individual subsystems. Upper-level courses tie the subsystems together to discuss how they interact, providing the HVAC-R technician or designer with knowledge regarding proper system operation.

## Career Opportunities

The program focuses on the basic operating principles of commercial and industrial HVAC systems, allowing one to pursue careers in sales, service, facilities operation, project management, laboratory technician, building automation, design, and many other niche and introductory technologies in HVAC.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1131 - Introduction to Revit MEP
- CAT 1601 - Building Electric \& Controls
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings
- HVA 1301 - Air \& Water Distribution Systems
- HVA 1352 - Psychrometrics, Health \& Comfort in HVAC
- HVA 1401 - HVAC Mechanical \& Electrical Troubleshooting
- HVA 2251 - Primary HVAC Equipment Operation \& Selection
- HVA 2351 - HVAC Systems \& Controls
- HVA 2780 - HVACR Engineering Technology Capstone Project
- MAT 1110 - Math for Technologists OR
- MAT 1200-Technical Mathematics
- MET 1131 - Personal Computer Applications for Engineering Technology
- OT36 Social \& Behavioral Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- HVACR Elective $2 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.


## HVACR Electives

- CAT 1201 - Construction Methods \& Materials
- CAT 1401 - Construction Cost Estimating
- CAT 1741 - Residential Electrical Systems
- CIS 1130 - Network Fundamentals
- CIS 1411 - Introduction to Networks
- EGV 1251 - Introduction to Energy Management Principles
- EGV 1301 - Architectural Energy Analysis
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- HVA 2297 - Special Topics
- HVA 2700 - HVACR Engineering Technology Internship
- HVA 2751 - HVAC-R Operations \& Best Practices


## Horticulture Technician, AAS

## Program Code: HTC.S.AAS • Credit Hours: 63

## Description

The Horticulture Technician degree uses courses from existing technical certificates as well as a general education base to fulfill an educational need for horticultural studies within the Miami Valley.

## Career Opportunities

The graduates can hold jobs in greenhouses, nurseries, and landscape businesses.

## Prerequisites

- DEV 0035 and MAT 0200

Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1203 - Trees \& Shrubs
- AGR 1204 - Plant Propagation
- AGR 1205 - Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design
- AGR 1209 - Greenhouse Management Capstone
- AGR 1400 - Agriculture Internship
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Social \& Behavioral Sciences Elective $\mathbf{3 C r}$. $\mathbf{H r}(\mathbf{s})$.


## Hospitality Management \& Tourism, AAS

## Program Code: HMTT.S.AAS • Credit Hours: 64

## Description

The Hospitality Management \& Tourism program prepares students for entry-level positions in restaurants, private clubs, beverage establishments, and general hospitality centers and includes skills in supervision, cost controls, purchasing and human relations. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

The hospitality/tourism industry is a broad category of fields within the service industry that includes lodging, restaurants, event planning, theme parks, transportation, cruise line, and additional fields within the tourism industry. The hospitality industry is a several billion dollar industry that mostly depends on the availability of leisure time and disposable income. It is the number one employer among service
industries and is fast becoming the largest single employment category of all industries worldwide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction such as front office managers, restaurant managers, convention services managers, airline attendants, assistant managers, meeting/event planners, car rental agencies, or travel firms.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 1136 - Front Office Operations
- HMT 1137 - Hospitality Industry Computer Systems
- HMT 1139 - Housekeeping Management
- HMT 1143-Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work Experience
- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100 - Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100 - Conversational Spanish I


## Hospitality Management \& Tourism/Bakery \& Pastry Arts, AAS

## Program Code: BPAO.S.AAS•Credit Hours: 65

## Description

The baking/pastry/confection program at Sinclair Community College prepares its graduates for an exciting career as a pastry chef. Skills learned in a commercial-grade bakery kitchen include proper mixing methods, shaping/sculpting techniques, advanced baking, and the science behind it all. Students will be allowed to showcase their creativity through artisan breads, pastries, chocolate and confection displays, as well as constructing show-stopping wedding cakes. Start today and allow our certified chefs to guide you through graduation and prepare you for an exciting career.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Culinary Arts program is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEF) and by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which both are recognized by the Council on Higher Education Accreditation (CHEA). Please visit acfchefs.org, acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

Students who graduate from the baking/pastry/confectionery concentration will find employment as a baker, pastry cook, pastry chef, pastry department assistant manager, or bake shop manager.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- DIT 1108 - Nutrition for the Culinary Professional
- ENG 1101 - English Composition I
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2118 - Artisan Breads
- HMT 2126 - Cake Production \& Cake Decoration
- HMT 2200 - Baking \& Culinary Fundamentals \& Commercial

Equipment OR

- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2218 - Advanced Pastry Skills
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2293 - Baking \& Pastry Arts Option Cooperative Work

Experience

- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts

Professional

- OT36 Arts \& Humanities Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- PSY 1100 - General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Hospitality Management \& Tourism/Culinary Arts, AAS

## Program Code: CAO.S.AAS • Credit Hours: 65

## Description

The Culinary Arts program provides the basic knowledge a student needs to develop into a certified chef. The serving of good food is important to the reputation of any restaurant. Chefs and cooks are responsible for preparing meals that are pleasing to the eye and taste. Through this specialized program, students develop extensive skills and knowledge of food preparation and presentation. Students also gain an understanding of the duties and responsibilities of a chef and other culinary personnel.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The Culinary Arts program is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEF) and by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which both are recognized by the Council on Higher Education Accreditation (CHEA). Please visit acfchefs.org, acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

Students completing the Culinary degree would find employment as a restaurant/banquet cook, short-order cook, fast food cook, private household cook, personal chef, food preparation worker, Sous chef, baker, pastry cook, pastry chef, galley cook, executive chef, executive pastry chef, research chef, corporate chef.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- DIT 1108 - Nutrition for the Culinary Professional
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1125 - Beverage Management
- HMT 1129 - Restaurant Desserts
- HMT 2200 - Baking \& Culinary Fundamentals \& Commercial

Equipment OR

- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2206 - Garde Manger
- HMT 2207 - Butchery \& Fish Management
- HMT 2208 - Advanced Culinary \& Competition Skills OR
- HMT 2209 - Advanced Culinary Skills
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2292 - Culinary Arts Option Cooperative Work Experience
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- OT36 Arts \& Humanities Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Hospitality Management \& Tourism/Lodging, AAS

## Program Code: HMTTL.S.AAS • Credit Hours: 65

## Description

The Hospitality Management \& Tourism/Lodging program prepares students for positions in hotels/lodging organizations, resorts, and includes skills in supervision and human relations. This degree also encompasses a basic understanding of meeting \& events, and the costing of food since both of these are found at all mid-level and full service properties.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

The hospitality and tourism industry is the number one employer among service industries, and is vastly becoming the largest single employment category of all industries worldwide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Right now, over half a million jobs in the hospitality industry go unfilled each year, and that number is likely to continue to grow. Top ranked hospitality
professionals have almost unlimited possibilities for career satisfaction as front office supervisors, front office managers, concierges, owners of bed and breakfasts, leaders in the car rental or travel agencies, tour operations, convention and visitors bureaus, and the airline industry.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1125 - Beverage Management
- HMT 1136 - Front Office Operations
- HMT 1137 - Hospitality Industry Computer Systems
- HMT 1138 - Managing Lodging Operations
- HMT 1139 - Housekeeping Management
- HMT 1141 - Destination Geography
- HMT 1143- Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 1150 - Meeting \& Event Planning
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work Experience
- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective 3 Cr. Hr(s).
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100 - Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100 - Conversational Spanish I


## Hospitality Management \& Tourism/Meeting \& Event Planning, AAS

## Program Code: HMTTM.S.AAS • Credit Hours: 65

## Description

The Hospitality Management \& Tourism Meeting \& Event Planning program prepares students for entry-level positions in hotels, resorts,
convention and visitor centers, corporate centers, private clubs, and meeting and event operations.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

The program is accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA), which is recognized by the Council on Higher Education Accreditation (CHEA). Please visit acpha-cahm.org and chea.org on the importance of being accredited.

## Career Opportunities

The hospitality/tourism industry is the number one employer among service industries, and is fast becoming the largest single employment category of all industries worldwide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product. Right now, over half a million jobs in the hospitality industry go unfilled each year, and that number is likely to continue to grow as the food service industry grows. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction as meeting/event planners for corporate events, association/non-profit events, government events, special events and expositions and largescale convention business.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 1141 - Destination Geography
- HMT 1143-Organization of the Travel Product
- HMT 1148 - Meeting \& Events Contracts \& Obligations
- HMT 1149 - Meeting \& Events Set-up \& Breakdown
- HMT 1150 - Meeting \& Event Planning
- HMT 1151 - Special Events, Expositions \& Festivals
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- HMT 2227 - Hospitality Marketing
- HMT 2230 - Risk \& Prevention Management
- HMT 2291 - Hospitality Management \& Tourism Cooperative Work

Experience

- HMT 2295 - Hospitality Management \& Tourism Capstone
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective\  $3 \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- SOC 1145 - Introduction to Cultural Anthropology
- Language Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Language Electives

- ASL 1111 - Beginning American Sign Language I
- CHN 1100 - Conversational Chinese I
- FRE 1100 - Conversational French
- GER 1100 - Conversational German
- JPN 1100 - Conversational Japanese I
- SPA 1100 - Conversational Spanish I


## Industrial \& Systems Engineering Technology, AAS

## Program Code: OPTIO.S.AAS • Credit Hours: 63-64

## Description

The Industrial and Systems Engineering Technology (ISET) program prepares individuals for leadership roles in the operations of business, industry, and service organizations with a special emphasis on ISET skills. Students learn analysis, continuous improvement, quality assurance, and problem-solving techniques that can be applied in financial, health care, manufacturing, and service/retail fields. Students take part in lecture-lab structured courses and hands-on demonstrations of course principles, assuring that they will gain practical knowledge as well as the fundamentals. Those who wish to further their studies may transfer to four-year colleges and universities.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Graduates are employed as Industrial and Systems Engineering Technicians, Quality Control Technicians, Production Supervisors, Continuous Improvement Specialists, and similar positions. Those who wish to further their studies may transfer to four-year colleges and universities.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2210 - Methods Engineering
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2250 - New Product Realization
- ISE 2260 - Work Flow \& Facility Design
- ISE 2700 - Industrial \& Systems Engineering Technology Internship OR
- ISE 2780 - Industrial \& Systems Engineering Technology Capstone
- MAN 2110 - Introduction to Project Management
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- PHY 1141 - College Physics I
- Industrial \& Systems Engineering Technology Electives $\mathbf{3}$ Cr. Hrs.

Industrial \& Systems Engineering Technology Electives

- ISE 1100 - Product Development Fundamentals
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- ISE 1310 - Advanced Metrology \& Gauging
- ISE 1313 - Coordinate Measurement
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- ISE 2240 - Six Sigma: Green Belt
- ISE 2310 - Quality Assurance
- ISE 2360 - Quality Management Systems \& Auditing


## Interior Design, AAS

## Program Code: IND.S.AAS Credit Hours: 64

## Description

The program prepares students for careers in the creative, detailoriented field of interior design. Students will develop the knowledge and technical skills necessary to design an interior. Developing floor plans and selecting and coordinating colors, floor and wall coverings are common tasks performed by interior designers. They also place furniture, fixture and cabinetry, and prepare drawings, cost estimates and contracts. Sustainability, building codes, the ADA and basic business practices are included, as well as the development of individual design portfolios.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

Interior design graduates typically pursue careers as designers or consultants in design studios, architecture firms or commercial retailers. Some graduates choose to continue their education in design or a related field at a four-year institution.

## Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods
- CAT 1101 - Architectural Graphics I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2130 - Non-Residential Design
- IND 2135 - Rendering
- IND 2140 - Sustainable Design
- IND 2260 - Interior Design Portfolio
- MRK 2145 - Principles of Retailing OR
- MRK 2225 - Sales Fundamentals
- PSY 1100 - General Psychology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- Interior Design Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Interior Design Electives

- ART 1101-2-D Foundations
- ART 1102 -3-D Foundations
- ART 1111 - Drawing I
- ART 1141 - Introduction to Ceramics
- ART 1161 - Black \& White Darkroom Photography I
- ART 2230 - Art History: Ancient through Medieval Periods
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- CAT 1121 - Architectural Graphics II
- CAT 1141 - Reading Architectural Drawings
- CAT 1201 - Construction Methods \& Materials
- CAT 2741 - Current Topics in Architecture
- IND 2280 - Kitchen \& Bath Design
- VIS 1180 - History \& Theory of Graphic Design
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production
- VIS 2270 - Design Internship


## Internet of Things (IoT) Cyber Technician, AAS

## Program Code: CETT.S.AAS • Credit Hours: 63-64

## Description

The Internet of Things Cyber Technician (IOTCT) program provides students with the skills and education to apply the Internetof- Things (IOT) and programming concepts in the exciting fields of automation, robotics and cyber/network security. The curriculum balances theory and laboratory applications and provides students with a strong background in electronics, programmable logic controllers, robots, robotic programming, networking, and cybersecurity. These in-demand skills prepare graduates for careers in logistics, supply chain, automation, repair/support of existing computer systems, networks, and their associated software which utilize robots and/or automated systems. The IOTCT program provides students a quality education in state-of-the-art laboratories with courses taught by highly qualified faculty who possess industry experience. Those who wish to further their studies are well prepared to pursue a bachelor's degree in Computer Engineering or Electronics and Computer Engineering Technology programs.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Entry level Cyber technician specializing in the IoT consumer market provides students with in-demand skills in electronics, programmable logic controllers, robots, robotic programming, networking, troubleshooting, and cybersecurity. Graduates will be able to work in all areas having to do with the IoT (Internet-of- Things) from programming to engineering hardware installations, medical devices, robotics, supply chain/logistics, and networking/ cybersecurity.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals OR
- CIS 1411 - Introduction to Networks
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2640 - Network Security
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2252 - Teach Pendant Robot Programming
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1101 - English Composition I
- MAT 1580 - Precalculus OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry
- OT36 Social \& Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I


## Interpreter Education, AAS

## Program Code: ASL.S.AAS • Credit Hours: 65

## Description

The Interpreter Education program provides the unique opportunity for students to develop a solid foundation in language, linguistics, culture and interpretation and to master the skills necessary to successfully function as an interpreter for Deaf, Hard of Hearing, and DeafBlind individuals in a variety of educational and community settings. Students will gain rich insights into the American Deaf community, their beliefs, values, history, rights and cultural norms. A grade of "C" or better is required in all ASL courses.

## Accreditation

This program holds accreditation by the Ohio Department of Education. Graduates are eligible to apply for the Interpreter for the Hearing Impaired Five-Year Associate Licensure.

## Career Opportunities

Employment opportunities are available in areas such as educational, community interpreter referral agencies, business, medical, legal, theatrical, governmental and religious interpreting settings.

## Program Prerequisite(s)

- DEV 0035 - Integrated Developmental Reading \& Writing II


## Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1102 - Interpreting Theory \& Best Practices
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 1228 - Intermediate American Sign Language I
- ASL 1229 - Intermediate American Sign Language II
- ASL 2201 - Interpreting I
- ASL 2202 - Interpreting II
- ASL 2203 - Interpreting III
- ASL 2207 - Role of the Interpreter
- ASL 2212 - Specialized Interpreting I
- ASL 2213 - Specialized Interpreting II
- ASL 2231 - Advanced American Sign Language I
- ASL 2236 - Transliterating \& Signing Modalities
- ASL 2261 - Practicum I
- ASL 2262 - Practicum II
- ASL 2300 - Educational Interpreting
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- PSY 1100 - General Psychology
- OT36 Arts \& Humanities Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.


## Legal Studies, AAS

## Program Code: PAR.S.AAS • Credit Hours: 61

## Description

The Legal Studies program educates students with practical assignments in a simulated law office environment. All student work models the professional, ethical and technology concepts they will use in the legal field. Student learning is supported by experienced paralegals who serve as team teachers. All legal studies students are required to complete an attorney-supervised internship for hands-on experience using their paralegal skills.

Classes are taught in a simulated law office environment that makes current practices and technology available to students. All full-time faculty in the Legal Studies program are licensed attorneys. Legal research is conducted by students both online and in professional law libraries. All students produce a personal portfolio of their legal work and benefit from an internship experience under the supervision of a licensed attorney.

A grade point average of 2.0 is required to enter the Paralegal program. A grade of " C " is required in all PAR courses. An overall grade point average of at least 2.0 is required to continue in the program, and is required for graduation. Students must take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Accreditation

The Legal Studies Program is approved by the American Bar Association, and fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation. All fulltime faculty in the Legal Studies Program are licensed attorneys. Sinclair is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools. Programs of study are approved by the Ohio Board of Regents. Completion of the Legal Studies Program does not authorize a graduate to practice law as an attorney, or to give legal advice.

## Career Opportunities

Graduates may find work in large and small law firms, the business world, courts and government agencies. Under the supervision of a lawyer, a professional paralegal may perform such interesting duties as investigating cases, interviewing clients and witnesses, preparing legal documents and legal research. These responsibilities are carried out in a
variety of legal fields, such as criminal law, probate, family law, litigation and real estate.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- ENG 1199 - Textual Editing
- ENG 1201 - English Composition II
- LAW 1101 - Business Law
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PAR Legal Studies Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2401 - Legal Studies Internship
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- RES 1201 - Real Estate Law

Legal Studies Electives

- CJS 1105 - Criminal Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- PAR 2507 - Legal Interviewing Skills
- PAR 2511 - Online Legal Research


## Manufacturing Technology, AAS

## Program Code: MFGT.S.AAS • Credit Hours: 60-62

## Description

This program prepares students for a career in Manufacturing by developing an understanding of manufacturing processes and how to implement and improve these processes in the areas of Mechanical and Industrial \& Systems Engineering Technology, Automation, and Advanced Manufacturing. The degree includes traditional classroom instruction and "hands-on" laboratory experience. The first year of study contains an embedded 31-credit hour certificate, Basic Manufacturing. The student may also achieve the Industry Recognized MSSC Certified Production Technician Certificate in the first year. The second year of study will culminate in an AAS degree in one of five certificate pathways. These pathways include General Manufacturing, Advanced Manufacturing, Automation Technology, Mechanical Engineering Technology, Industrial \& Systems Engineering Technology and Digital Thread Technology.

## Career Opportunities

Careers from entry-level to mid-level are possible in these fields General Manufacturing, Advanced Manufacturing, Automation Technology,
Mechanical Engineering Technology, and Industrial \& Systems Engineering Technology.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- COM 2211 - Effective Public Speaking
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM)

Systems

- ENG 1101 - English Composition I
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering

Technology

- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- OT36 Social \& Behavioral Sciences Elective 3 Cr. Hr(s).
- OT36 Arts and Humanities Elective - 3 Cr. Hr.(s)
- Choose one pathway - 14-16 Cr. $\mathrm{Hr}(\mathrm{s})$.

General Manufacturing
Advanced Manufacturing
Automation Technology
Mechanical Engineering Technology
Industrial and Systems Technology
Digital Thread

General Manufacturing

- CAM 1142 - Advanced Shop Floor Math
- CAM 2145 - Shop Floor Programming
- EET 1120 - Introduction to DC \& AC Circuits
- ISE 2240 - Six Sigma: Green Belt
- MET 2151 - Material Science


## Advanced Manufacturing

- CAM 1110 - Advanced Machine Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- CAM 1214 - Computer Numerical Control Mill Programming OR
- CAM 2204 - Computer Numerical Control Lathe Programming
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1144 - Sensors \& Vision Systems

Mechanical Engineering Technology

- MET 1301 - SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process
- MET 2151 - Material Science

Industrial and Systems Technology

- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 2210 - Methods Engineering
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt


## Digital Thread

- BIS 1010 - Digital Thread Data Management
- CIS 1010 - Digital Thread Cyber Security
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- MAN 1010 - Digital Thread Enhanced Logistics


## Mechanical Engineering Technology, AAS

## Program Code: MEGT.S.AAS • Credit Hours: 60-62

## Description

The Mechanical Engineering Technology program provides the courses needed to begin a career as a technician in the engineering field. As a mechanical engineering technology graduate, career options are open in a diverse number of fields and companies. Students will complete relevant and practical coursework taught by knowledgeable faculty. The courses are non-calculus based, and electives can tailor the degree to an individual's needs.

## Career Opportunities

Graduates may enter a variety of industries in entry-level positions doing conceptual design, systems engineering, manufacturing, product research and development, or related technical work.

## Program Requirements

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 2101 - Thermodynamics
- MET 2151 - Material Science
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2281 - Engineering Technology Professional Practice
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics
- MET 2401 - Machine Design
- MET 2780 - Mechanical Engineering Technology Capstone
- OT36 Social and Behavioral Sciences Elective 3 Cr. Hr(s).
- PHY 1141 - College Physics I
- Mechanical Engineering Technology Elective 6-7 Cr. $\mathbf{H r}(\mathbf{s})$.


## Mechanical Engineering Technology Electives

- AUT 1108 - Automotive Engine Systems
- AUT 1116 - Automotive Steering \& Suspension Systems
- AVT 1106 - Airframe Safety Systems
- AVT 1113 - Drawings for Aviation
- AVT 2138 - Engine Fuel \& Fuel Metering
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1116 - Fundamentals of Computer Numerical Control

Operations

- CAM 1180 - Welding \& Metal Joining I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1150 - DC Circuits
- EET 1155 - AC Circuits
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1217 - Fluid Power \& Control
- EGV 1101 - Alternate \& Renewable Energy Sources
- EGV 1251 - Introduction to Energy Management Principles
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 2240 - Six Sigma: Green Belt
- MET 1151 - Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process
- MET 2700 - Mechanical Engineering Technology Internship
- PHY 1142 - College Physics II
- PHY 2210 - MATLAB for Scientists \& Engineers


## Medical Assistant Technology, AAS

## Program Code: MAS.S.AAS • Credit Hours: 60

## Description

Medical assistants are multi-skilled professionals who assist physicians with the administrative and clinical aspects of patient care. The Medical Assistant Technology degree is designed to be completed in four (4) semesters on a full-time basis. The degree consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all degree courses. The student will be required to complete 210 hours of unpaid supervised practicum during their third semester of the program. Note: A Healthcare Professional CPR, Health Certificate, Immunizations, Student Health Insurance, and background check must be completed prior to enrolling in the practicum component of the curriculum. The graduate is eligible to sit for a national exam to become a credentialed medical assistant.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College's Medical Assistant certificate program is accredited the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).
Commission on Accreditation of Allied Health Education Programs, 9355 113th Street N., \#7709, Seminole, FL 33775

## Career Opportunities

Currently Medical Assistant Technology is one of the fastest growing occupations in the United States. Options for individuals seeking medical services and treatment: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMOs), multi-physician group practices and medical specialty clinics have opened new career opportunities.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1107 - Core Concepts of Public Health
- ALH 1140 - Fundamentals of Disease Processes
- ALH 2201 - Survey of Drug Therapy
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1102 - Clinical Medical Assisting I
- MAS 1103 - Clinical Medical Assisting II
- MAS 1110 - Administrative Medical Assisting
- MAS 1130 - Reimbursement Specialist Practicum
- MAS 1192 - Lab for MAS 1102
- MAS 1193 - Lab for MAS 1103
- MAS 2201 - Clinical Medical Assisting III
- MAS 2210 - Medical Billing Specialist
- MAS 2220 - MAS Practicum
- MAS 2291 - Lab for MAS 2201
- MAS Medical Assistant Technology Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective 3 Cr. $\mathrm{Hr}(\mathrm{s})$.
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology

Medical Assistant Technology Electives

- ACC 1210 - Introduction to Financial Accounting
- BIO 2205 - Microbiology
- BIS 1120 - Introduction to Software Applications
- BIS 1221 - Specialized Computer Applications for Health

Information Management

- CIS 1107 - Introduction to Operating Systems
- CIS 1160 - Introduction to Data Literacy
- COM 2235 - Principles of Interviewing
- COM 2285 - Organizational Communication
- DIT 1108 - Nutrition for the Culinary Professional
- DIT 1525 - Human Nutrition
- ECO 1100 - Introduction to Economics
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory
- HIM 2262 - Advanced Medical Office Coding
- LAW 1101 - Business Law
- MAN 2110 - Introduction to Project Management
- MHT 1101 - Introduction to Mental Health Services
- PSY 2126 - Stress Management
- PSY 2180 - Psychology of Gender
- PSY 2200 - Lifespan Human Development
- PSY 2205 - Child Development
- PSY 2206 - Adolescent \& Adult Development
- PSY 2228 - Industrial Organizational Psychology
- SOC 1108 - Appalachian Families
- SOC 1160 - Sociology of Aging
- SOC 2215 - Race \& Ethnicity
- SWK 1206 - Introduction to Social Work


## Medical Laboratory Technology, AAS

## Program Code: CLT.S.AAS•Credit Hours: 60-64

## Description

The associate degree program in Medical Laboratory Technology prepares students to enter the workforce as Laboratory Technicians. In this profession, graduates are responsible for performing routine clinical laboratory tests as the primary analysis, making specimen oriented decisions on predetermined criteria, including a working knowledge of critical values. As part of the program, the students will
complete a non-paid, supervised health-related practicum in a hospital lab setting.

This degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage.

Students will have a maximum of three opportunities to successfully complete BIO 1121, ALH 1101, and all general education courses required by the program. All course withdrawals (W) or failures (D) or (F) will countas an attempt. After a third unsuccessful attempt, the student is no longer eligible to enter or continue in the program.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Sinclair Community College's Clinical Laboratory Technology associate degree program is accredited by the National
Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 66018; P:773.714.8880; naaclsinfor@naacls.org

## Career Opportunities

Laboratory Technicians perform highly technical diagnostic tests in medical or scientific laboratories. Lab technicians might collect samples, study and perform tests on body fluids, chemical compounds and biological specimens. Lab techs use various types of lab equipment and complex computer programs to perform their tests.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I OR
- BIO 1121 - Human Anatomy \& Physiology I AND
- Approval of Department AND
- 2.7 cumulative grade point average or greater is required for admission to the program and to begin technical studies AND
- Completion of Test of Essential Academic Skills (TEAS) required AND
- Students have a maximum of three opportunities to successfully complete BIO and MAT courses. Students may withdraw or fail, but must successfully complete the course on or before the third attempt. Students are ineligible for admission to the Clinical Laboratory Technology Program after a third unsuccessful course attempt.


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2220 - Pathophysiology
- BIO 1171 - Principles of Biology I
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II OR
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I OR
- CHE 1121 - Introduction to Chemistry II AND
- CHE 1161 - Lab for Introduction to Chemistry II OR
- CHE 1221 - General Chemistry II AND
- CHE 1261 - Lab for General Chemistry II OR
- CLT 1200 - Introduction to Clinical Laboratory
- CLT 1203 - Lab for Introduction to Clinical Laboratory
- CLT 2110 - Urine \& Body Fluid Analysis/Immunology/Serology
- CLT 2113 - Lab for Urine \& Body Fluid

Analysis/Immunology/Serology

- CLT 2210 - Hematology
- CLT 2213 - Lab for Hematology
- CLT 2310 - Clinical Chemistry
- CLT 2313 - Lab for Clinical Chemistry
- CLT 2410 - Clinical Microbiology/Parasitology
- CLT 2413 - Lab for Clinical Microbiology/Parasitology
- CLT 2510 - Immunohematology
- CLT 2513 - Lab for Immunohematology
- CLT 2810 - CLT Practicum
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1450 - Introductory Statistics
- PSY 1100 - General Psychology


## Mental Health Services, AAS

## Program Code: MHT.S.AAS • Credit Hours: 65

## Description

The Mental Health Services degree prepares entry-level mental health professionals as members of an inter-disciplinary team under clinical supervision. Duties may include client interviewing, crisis intervention, advocacy, group facilitation and case management. The Mental Health Services degree can be completed on a full-time or part-time basis. If enrolled full-time, it is designed to be completed in five (5) semesters. This degree consists of open enrollment courses (general education and division specific) and program specific courses restricted to majors. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry in to limited enrollment MHT courses, students must have a 2.0 cumulative GPA, a grade of C or higher in all program courses and complete MHAS Online Orientation and an initial faculty advising appointment while enrolled in MHT 1101 Introduction to Mental Health Services. The practicum portion of the curriculum provides 420 hours of supervised clinical experience.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Graduates can work as mental health technicians, chemical dependency counselor assistants, social work assistants, case managers and several other jobs in hospitals or or mental health treatment settings.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1111 - General Biology I
- ENG 1101 - English Composition I
- MHT 1101 - Introduction to Mental Health Services
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 1201 - Interviewing Skills
- MHT 1202 - Motivational Interviewing
- MHT 1203 - Professional Documentation
- MHT 2105 - Mental Health Treatment Methods
- MHT 2111 - Group Dynamics I
- MHT 2121 - Practicum I
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 2211 - Group Dynamics II
- MHT 2222 - Practicum II
- MHT 2245 - Mental Health \& the Family
- MHT 2250 - Child \& Adolescent Mental Health
- PSY 1100 - General Psychology
- PSY 1160 - Black Psychology
- PSY 2217 - Abnormal Psychology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Nursing, AAS

## Program Code: NUR.S.AAS • Credit Hours: 65

## Description

The Nursing program prepares students to meet the health needs of a diverse population in a variety of dynamic community environments. The curriculum is divided among nursing theory, nursing clinical practice, general education, and the sciences, where students participate in classroom, laboratory, and clinical experiences. Graduates of the program are eligible to take the NCLEX-RN for licensure.

The Nursing program is designed to be completed in five (5) semesters on a full-time basis. The curriculum may be taken on a part-time basis, but the nursing courses must be taken in sequence. This degree program consists of open enrollment courses (general education and division-specific) and program-specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. Details on eligibility for the limited enrollment courses can be found online in the Nursing Student Handbook.

Sinclair offers advance placement into the nursing program for qualified Licensed Practical Nurses (LPNs) or equivalent military experience and transfer students. After successful completion of the transition courses (NSG 1700 and NSG 1750), students will receive articulated credit for ALH 1101 , NSG 1400, NSG 1450, NSG 1600 , and NSG 1650. Additionally, NSG 1200 and the science elective will be waived. Those students will continue to NSG 2400/2450. Students transferring from other nursing programs must meet the criteria outlined in the online Nursing Student Handbook.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether the student may enroll.

## Accreditation

The Associate Degree Nursing (ADN) program is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN), 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326, (404) 9755000 , and approved by the State of Ohio Board of Nursing.

## Career Opportunities

Registered nurses have a variety of employment opportunities. Workplace settings may include hospitals, extended care and long-term care facilities, rehabilitation programs, physicians' offices, home health agencies and various types of clinics and outpatient services.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective AND
- NSG 1200 - Introduction to Nursing AND
- High School Diploma or equivalency AND
- GPA 2.5 or greater AND
- Proficiency on all four areas of the Test of Essential Academic Skills (TEAS) exam AND
- Nurse Aide training course or equivalent work experience AND
- Restricted to Majors


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2202 - General Pharmacology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology OR
- CHE 1111 - Introduction to Chemistry I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r . ~} \mathbf{H r}(\mathbf{s})$.
- NSG 1200 - Introduction to Nursing
- NSG 1400 - Health \& Illness I: Foundational Concepts in Nursing
- NSG 1450 - Professional Nursing I: Introduction to the Role of the Professional Nurse
- NSG 1600 - Health \& Illness II: Health \& Wellness Concepts
- NSG 1650 - Professional Nursing II: Healthcare System Concepts
- NSG 2400 - Health \& Illness III: Health \& Wellness Concepts
- NSG 2450 - Professional Nursing III: Leadership \& Management of Care
- NSG 2600 - Concept Synthesis
- PSY 1100 - General Psychology


## Nutrition and Dietetics Technician, AAS

## Program Code: DIT.S.AAS • Credit Hours: 60-61

## Description

Graduates of the Nutrition and Dietetics Technician (DIT) program are trained food and nutrition practitioners that work under the supervision of a registered dietitian nutritionist (RDN). As an integral member of the health care and food service management teams, they influence food choices and lifestyles to promote optimal health. The program consists of five major domains that include clinical, community, education, management and foodservice systems. It is designed to be completed in five (5) consecutive semesters on a full-time basis. Some students elect to attend on a part-time basis, extending the length of study to three academic years. The curriculum consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The limited enrollment coursework includes 630 hours of unpaid directed practice experiences at area community, food service and health care facilities. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the program webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all program courses. Students of Sinclair's Nutrition and Dietetics Program are eligible to become members of the Academy of Nutrition and Dietetics (AND), a nationally recognized organization located at 120 South Riverside Plaza, Suite 2190, Chicago Illinois 60606, 1-800-877-1600, www.eatright.org. This specially designed program enables students to enjoy benefits of student AND membership while attending school. Graduates are eligible for active AND membership. Benefits include networking, professional growth, educational enrichment, and developing leadership skills. The graduate is eligible to take the National Credentialing Exam to become a Nutrition and Dietetics Technician, Registered (NDTR).

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Dietetic Technician program is fully accredited by the Accreditation Council on Education for Nutrition and Dietetics (ACEND) of the Academy on Nutrition and Dietetics (AND). It is also approved by the Association of Nutrition and Food Professionals (ANFP).

Nutrition and Dietetic technicians, registered (NDTRs) work independently or in teams with registered dietitian nutritionists (RDNs) in a variety of employment settings, including health care (hospitals, nursing homes, retirement centers, home health care programs), foodservice (schools, day-care centers, correctional facilities, restaurants, health care facilities, corporations and hospitals), community/public health (public health agencies, health clubs, weight management clinics and community wellness centers) and business and industry (food companies, food vending and distributing operations).

## Program Prerequisite(s)

- MAT 0100 - Algebra I AND
- DEV 0035 - Integrated Developmental Reading \& Writing II AND
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession AND
- DIT 1525 - Human Nutrition


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- BIO 1108 - Lab for Human Biology
- COM 2206 - Interpersonal Communication
- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 1210 - Medical Terminology for Dietetics
- DIT 1525 - Human Nutrition
- DIT 1630 - Nutrition Through the Lifecycle
- DIT 1635 - Community Nutrition
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2240 - Motivational Interviewing, Nutrition Counseling \& Communication
- DIT 2305 - Food, Culture \& Cuisine
- DIT 2310 - Lab for Food, Culture \& Cuisine
- DIT 2505 - Food Science \& Production Lab I
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2625 - Medical Nutrition Therapy I
- DIT 2630 - Medical Nutrition Therapy Clinical I
- DIT 2735 - Foodservice Retail Business Management \& MidProgram Assessment
- DIT 2740 - Retail Business Management Directed Practicum
- DIT 2845 - Medical Nutrition Therapy II
- DIT 2850 - Medical Nutrition Therapy Clinical II
- DIT 2855 - Nutrition \& Dietetics Program Assessment Capstone
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics
- PSY 1100 - General Psychology


## Occupational Therapy Assistant, AAS

## Program Code: OTA.S.AAS • Credit Hours: 65

## Description

## Career Opportunities

Occupational therapy assistants (OTAs), under the supervision of occupational therapists, provide services to individuals whose abilities to cope with daily tasks are threatened or impaired by developmental deficits, aging, injury or illness. OTAs help people prevent, lessen, or overcome physical, cognitive and/or psychosocial dysfunction so that they are able to function with maximum independence. The program includes extensive clinical training that must be finished within 12 months of completion of the academic course work. A grade of "C" or higher ( $77 \%$ ) is required in all program courses to remain in the program.

The Occupational Therapy Assistant program is designed to be completed in five (5) semesters on a full-time basis, when the student begins the technical portion of the program. This degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses (OTA specific courses). To qualify for entry to limited enrollment courses, please see the OTA Program Specific Applicant Information Packet (PDF) located on the webpage (http://www.sinclair.edu/program/params/programCode/OTA-SAAS/).

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at ACOTE c/o AOTA, 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. AOTA's telephone number is (301)6522682. www.acoteonline.org/ The program received a 10 -year reaccreditation term in 2021-2022. It is scheduled to be reaccredited in 2031-2032.

## Career Opportunities

Occupational therapy is a health care field in which the demand for personnel continues to increase. There are not enough qualified personnel to fill the demand. According to the Bureau of Labor Statistics (bls.gov) the Job Outlook is $40 \%$ (much faster than average job growth 2014-2024). Occupational therapy assistants work in hospitals, clinics, schools, nursing facilities, group homes, home health agencies and rehabilitation centers.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- OTA 1111 - Introduction to Occupational Therapy Assistant AND
- Completion of Test of Essential Academic Skills (TEAS) Exam AND
- Minimum cumulative GPA of 2.5

Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes OR
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- OTA 1111 - Introduction to Occupational Therapy Assistant
- OTA 1211 - Occupational Therapy Assistant Foundations I
- OTA 1212 - Functional Anatomy
- OTA 1213 - Occupational Therapy \& Adults with Physical Dysfunction
- OTA 1214 - Occupational Therapy \& Adults with Physical Dysfunction Lab
- OTA 1311 - Occupational Therapy Assistant Foundations II
- OTA 1312 - Occupational Therapy \& Human Development
- OTA 1313 - Occupational Therapy \& Adults with Neurological Dysfunction
- OTA 1314 - Occupational Therapy \& Neurological Dysfunction Lab
- OTA 1315 - Therapeutic Use of Self
- OTA 2412 - Occupational Therapy Assistant \& Pediatrics
- OTA 2413 - Occupational Therapy Assistant \& Pediatrics Lab
- OTA 2414 - Occupational Therapy Assistant \& Psychosocial Dysfunction
- OTA 2415 - Occupational Therapy Assistant \& Psychosocial Dysfunction Lab
- OTA 2416 - Occupational Therapy Assistant Level 1 Fieldwork
- OTA 2511 - Occupational Therapy Assistant Level 2 Fieldwork A
- OTA 2512 - Occupational Therapy Assistant Level 2 Fieldwork B
- OTA 2523 - Occupational Therapy Assistant Clinical Issues A
- OTA 2524 - Occupational Therapy Assistant Clinical Issues B
- PSY 1100 - General Psychology
- SOC 2215 - Race \& Ethnicity


## Physical Therapist Assistant, AAS

## Program Code: PTA.S.AAS • Credit Hours: 65

## Description

The Physical Therapist Assistant (PTA) program prepares students to provide physical therapy services under the direction and supervision of a physical therapist. The curriculum is divided among general education and technical courses, and includes classroom, laboratory, and clinical education experiences. Upon completion of the PTA program curriculum, the student is awarded the Associate of Applied Science (AAS) degree. Graduates of the program are eligible to take the National Physical Therapy Examination for Physical Therapist Assistants (NPTE-PTA) for licensure.

The PTA program is designed to be completed in five (5) semesters on a full-time basis. The degree program consists of open enrollment courses (prerequisites and general education) and program specific technical courses with limited enrollment. The open enrollment courses may be taken prior to entry into the program technical courses. The PTA program enrolls students through two different pathways, a general admissions pathway and an Accelerated Admission for Academic Achievement (AAAA). Details on admissions eligibility and processes can be found online in the PTA Program Information Packet.

The mission of the PTA program is to provide high quality education to students seeking the opportunity to practice as a physical therapist assistant under the direction and supervision of a physical therapist.

## Accreditation

The Physical Therapist Assistant Program at Sinclair Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program/institution directly, please call 937-5125355 or email ptaprogram@sinclair.edu.

## Career Opportunities

Graduates, once licensed by the State of Ohio, work either full- or parttime under the supervision of a physical therapist in a variety of practice environments, such as outpatient clinics, rehabilitation units in hospitals or nursing homes, assisted living, home health or schoolbased programs.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences OR

OT36 Mathematics Elective AND

- PHY 1106 - Physics for Technology AND
- PHY 1107 - Lab for Physics for Technology AND
- PTA 1000 - Introduction to Physical Therapy AND
- The student must be at least 18 years of age by initiation of PTA technical courses AND
- The student must meet minimum requirements as identified in the PTA Program Information Packet.


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes OR
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PHY 1106 - Physics for Technology
- PHY 1107 - Lab for Physics for Technology
- PSY 1100 - General Psychology
- PTA 1000 - Introduction to Physical Therapy
- PTA 1100 - Professional Issues
- PTA 1155 - Functional Anatomy
- PTA 1165 - Manual Therapy
- PTA 1215 - Functional Mobility
- PTA 1300 - Pathophysiology for the PTA
- PTA 1325 - Neuropathophysiology
- PTA 1350 - Therapeutic Exercise
- PTA 1375 - Professional Issues II
- PTA 2305 - Neuromuscular Rehabilitation
- PTA 2315 - The Medically Complex Patient
- PTA 2330 - Seminar for Clinical Practicum I
- PTA 2335 - Clinical Practicum I
- PTA 2355 - Physical Agents
- PTA 2365 - Orthopedics
- PTA 2430 - Seminar for Clinical Practicum II
- PTA 2435 - Clinical Practicum II


## Public Health, AAS

## Program Code: PH.S.AAS • Credit Hours: 66-64

## Description

The associate of applied science degree in Public Health provides students with the introductory foundations for a future career in public health. Graduates of the program will be equipped with the population health skills to address the world's most pressing health issues. The program is also designed to promote transferability to the bachelor's degree completion programs in the health field.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether the student may enroll.

## Career Opportunities

Career opportunities include: Health Educator; Health Promotion Program Coordinator; Public Health Study Coordinator; Injury Prevention Specialist; Healthcare Navigator; Community Health Worker; Community Activist; Disease Prevention Activist; Homeless Services Educator; Consumer Advocate.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1105 - Overview of Holistic Health
- ALH 1107 - Core Concepts of Public Health
- ALH 1127 - Public Health Program Planning \& Intervention
- ALH 1140 - Fundamentals of Disease Processes
- ALH 1250 - Health Science Practicum
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- MAS 1102 - Clinical Medical Assisting I OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe OR
- ALH 1120 - Nurse Aide Training
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- ENS 1118 - Lifetime Physical Fitness \& Wellness
- ENS 1214 - Personal \& Community Health Behavior
- ENS 2420 - Concepts of Lifestyle Coaching
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{~ C r} \mathbf{~ H r}(\mathbf{s})$.
- MHT 1101 - Introduction to Mental Health Services
- MHT 1202 - Motivational Interviewing
- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- PSY 2126 - Stress Management
- PSY 2200 - Lifespan Human Development
- SOC 1101 - Introduction to Sociology


## Radiologic Technology, AAS

## Program Code: RAT.S.AAS • Credit Hours: 62

## Description

As a specialized discipline within the radiologic science profession, radiographers perform medical imaging procedures to aid the physician in the diagnosis and treatment of injury and disease. Graduates will be eligible to apply for the national credentialing examination offered by the American Registry of Radiologic Technologists (ARRT). Successful completion of the ARRT credentialing examination simultaneously satisfies the Ohio Department of Health (ODH) Radiologic Licensure Program requirements.

The Radiologic Technology program is designed to be completed in five (5) semesters on a full-time basis when the student begins the technical portion of the program. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. Completion of prerequisites and a cumulative GPA of 2.8 is required, as well as a grade of " C " or higher is required in all program courses.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

The Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), located at 20 N. Wacker Drive, Suite 2850, Chicago, IL. 60606-3182. 312-7045300 mail@jrcert.org or www.jrcert.org

## Career Opportunities

A career in Radiologic Technology can lead in many directions. Graduates may find employment in comprehensive hospitals, suburban or rural outpatient centers or physician offices. Completion of this associate degree program can also lead to additional educational opportunities such as higher degree programs in management, education, etc. and advanced imaging programs designed to prepare radiographers for specialization in imaging modalities such as Computed Tomography (CT), Magnetic Resonance Imaging (MRI), etc.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1107 - Human Biology AND
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology AND
- MAT 1470 - College Algebra AND
- RAT 1101 - Introduction to Radiologic Technology
- AND Approval of Department


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1470 - College Algebra
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- RAT 1101 - Introduction to Radiologic Technology
- RAT 1111 - Clinical Practicum I
- RAT 1121 - Radiographic Procedures I
- RAT 1131 - Patient Care in Radiologic Technology
- RAT 1212 - Clinical Practicum II
- RAT 1222 - Radiographic Procedures II
- RAT 1241 - Radiologic Sciences I
- RAT 2413 - Clinical Practicum III
- RAT 2415 - Radiographic Pathology
- RAT 2423 - Radiographic Procedures III
- RAT 2429 - Lab for Radiographic Procedures III
- RAT 2442 - Radiologic Sciences II
- RAT 2514 - Clinical Practicum IV
- RAT 2526 - Capstone in Radiologic Technology
- RAT 2543 - Radiologic Sciences III


## Real Estate, AAS

Program Code: RES.S.AAS • Credit Hours: 61-62

## Description

In the Real Estate degree program, students acquire a variety of skills in selling, marketing, leasing, buying, appraising, investing in and managing real property. Courses are offered which are required by the Ohio Division of Real Estate for persons taking the real estate sales examination

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

This program is fully accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a specialized accreditation recognized by the Council on Higher Education Accreditation (CHEA).

## Career Opportunities

Employment opportunities include but are not limited to careers in property management, investing, appraising, abstracting, and real estate sales.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ECO 2180 - Principles of Microeconomics
- ENG 1101 - English Composition I
- FIN 2450 - Personal Finance
- LAW 1101 - Business Law
- MAN 2150 - Management \& Organizational Behavior
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.
- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r . ~} \mathbf{H r}(\mathbf{s})$.
- PLS 1232 - State \& Local Government
- RES Real Estate Elective 5-6 Cr. $\mathbf{H r}(\mathbf{s})$.
- RES 1101 - Real Estate Principles
- RES 1102 - Real Estate Abstracting
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal
- RES 1302 - Real Estate Investment: Analysis \& Financing
- RES 1402 - Property Management
- RES 2170 - Real Estate Internship
- SOC 1101 - Introduction to Sociology


## Real Estate Electives

- ACC 1220 - Introduction to Managerial Accounting
- CAT 1161 - Introduction to the Built Environment
- ENT 2140 - Small Business Finance
- MAN 2140 - Human Resource Management
- MRK 2135 - Digital Marketing
- MRK 2225 - Sales Fundamentals


## Respiratory Care, AAS

## Program Code: RET.S.AAS • Credit Hours: 65

## Description

Respiratory care practitioners are responsible for the prevention, treatment, management and rehabilitation of patients of all ages with deficiencies or abnormalities associated with the cardiopulmonary system. The Respiratory Care program is designed to be completed in five (5) semesters (excluding prerequisites), on a full-time basis. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A cumulative GPA of 2.5 is required and an overall grade point average of at least 2.0 is necessary for continuance in the program and graduation.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The program is fully accredited by the Commission on Accreditation for Respiratory Care (CoARC), www.coarc.com. For further information regarding the Sinclair College respiratory care program outcomes data, please visit the CoARC website. Upon completion of the program the graduate is eligible for the national credentialing examinations provided by the National Board for Respiratory Care (NBRC). Graduates will also be eligible for a license to practice in the State of Ohio via the State Medical Board of Ohio. In addition, graduates meet the requirements for licensure in other states.

## Career Opportunities

Respiratory Care is a growing profession with opportunities for graduates to work with newborn, children, adult and geriatric patients in hospitals/acute care setting, long-term facilities, home care/durable medical equipment companies and physician offices.

## Program Prerequisite(s)

- BIO 1107 - Human Biology AND
- CHE 1111 - Introduction to Chemistry I AND
- HIM 1101 - Medical Terminology AND
- RET 1100 - Introduction to Respiratory Care AND
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology
- CHE 1111 - Introduction to Chemistry I
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- RET 1100 - Introduction to Respiratory Care
- RET 1101 - Respiratory Care Fundamentals I
- RET 1102 - Lab for Respiratory Care Fundamentals I
- RET 1124 - Cardiopulmonary Pharmacology I
- RET 1125 - Respiratory Care Sciences
- RET 1201 - Respiratory Care Fundamentals II
- RET 1202 - Lab for Respiratory Care Fundamentals II
- RET 1203 - Respiratory Care Clinic I
- RET 1205 - Cardiopulmonary Disease Processes
- RET 1301 - Respiratory Care Fundamentals III
- RET 1303 - Respiratory Care Clinic II
- RET 2101 - Critical Care I
- RET 2102 - Lab for Critical Care I
- RET 2103 - Respiratory Care Clinic III
- RET 2124 - Cardiopulmonary Pharmacology II
- RET 2201 - Critical Care II
- RET 2202 - Lab for Critical Care II
- RET 2203 - Respiratory Care Clinic IV
- RET 2204 - Respiratory Care Clinic V
- RET 2220 - Respiratory Care Emergency Preparedness
- RET 2222 - Lab for Respiratory Care Emergency Preparedness
- RET 2250 - Pediatrics \& Neonatology


## Surgical Technology, AAS

## Program Code: SUT.S.AAS • Credit Hours: 60

## Description

The Surgical Technology program at Sinclair Community College has been CAAHEP approved since 1998 and offers the opportunity to prepare for a career as a member of a surgical team.

A surgical technologist works together with the surgeon, registered nurse, and anesthesiologist as a member of the surgical team. To ensure proper surgical case management, the surgical technologist prepares and passes all sterile instruments during the surgical procedure while maintaining the sterile field and anticipating the needs of the surgeon.

The surgical technologist helps to meet the needs of patients in the operating rooms of hospitals, ambulatory surgery centers, physician offices, diagnostic facilities and other agencies where surgery is performed.

The Surgical Technology program is designed to be completed in five (5) semesters on a full-time basis. The degree program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses.

A cumulative GPA of 2.5 is required, as well as a grade of " C " or higher in all program courses.

The program includes both didactic instruction and supervised clinical practice in all areas required by the ARC/STSA (in collaboration with CAAHEP). Supervised clinical practice in area operating rooms include participating in procedures in general surgery, obstetrics and gynecology, ophthalmology, otorhinolaryngology, plastic surgery, urology, orthopedics, neurosurgery, thoracic surgery, cardiovascular, and peripheral vascular surgery.

Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Accredited by CAAHEP (Commission on Accreditation of Allied Health Education Programs), Sinclair's Surgical Technology program provides students with the opportunity to work as a Certified Surgical Technologists. In this program, students will be required to complete the academic classroom requirements, but will also have the opportunity to gain valuable supervised clinical practice. As part of the curriculum, the students will rotate through the clinical affiliates as scheduled in the course sequence. The standard surgical rotation case requirements that students must achieve is 120 cases, following the Core Curriculum for Surgical Technology, 6e (CCST6e). Students are required to complete a minimum of thirty (30) cases in General Surgery, twenty (20) of which should be in the First Scrub Role. In addition, students are required to complete a minimum of ninety (90) cases in various surgical specialties. Sixty (60) of those cases should be in the first scrub role and evenly, but not necessarily equally distributed between a minimum of four (4) surgical specialties.

## Career Opportunities

A Surgical Technologist helps to meet the surgical needs of patients in the operating rooms in a variety of different environments. Employment may be found in hospital operating rooms, same day surgery centers, labor and delivery units, endoscopy units, and many other settings where invasive therapeutic or diagnostic surgical procedures are performed. Surgical Technologists may also be employed privately by a surgeon or by surgeon group practices that have specialized teams.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- ENG 1101 - English Composition I AND
- HIM 1101 - Medical Terminology AND
- MAT 1130 - Mathematics in Health Sciences AND
- Restricted to Majors


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2201 - Survey of Drug Therapy
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIO 2205 - Microbiology
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences
- PSY 1100 - General Psychology
- SUT 1110 - Theory \& Fundamentals
- SUT 1117 - Laboratory for Theory \& Fundamentals
- SUT 1120 - The Surgical Process
- SUT 1127 - Lab for the Surgical Process
- SUT 2110 - Surgical Procedures I
- SUT 2117 - Directed Practice for Surgical Procedures I
- SUT 2120 - Surgical Procedures II
- SUT 2127 - Directed Practice for Surgical Procedures II
- SUT 2200 - Surgical Procedures III
- SUT 2207 - Directed Practice for Surgical Procedures III
- SUT 2300 - Surgical Technology Review


## Unmanned Aerial Systems, AAS

## Program Code: UAS.S.AAS • Credit Hours: 60-64

## Description

The Unmanned Aerial Systems (UAS) degree program prepares students for entry level positions in the UAS industry by providing foundational knowledge and skills in UAS mission planning, applications, maintenance, laws and regulations, and data analytics, and project management using UAS platforms. Program content includes an introduction to UAS flight, history, avionics, sensors, communications systems and selectable paths including Data Analysis and applications such as First Responders, Geographic Information Systems, Precision Agriculture, and Entrepreneurship. Students will prepare for and conduct unmanned flights similar to those commonly performed in the industry observing Federal Aviation Administrations (FAA) regulations that govern UAS operations.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

The Sinclair Unmanned Aerial Systems Associate of Applied Science degree will produce graduates who will serve the immediate Dayton area, broader region, and nationally. Graduates of the associate degree program from Sinclair Community College will contribute to filling the current and growing need within the state of Ohio and nation for unmanned aerial systems related applications such as Geographic Information, Data Analytics, First Responders and Precision Agriculture.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1246 - Air Traffic Control Communications
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- AVT 2240 - Human Factors in Aviation
- AVT 2279 - Unmanned Aerial Systems Project
- AVT 2280 - Introduction to UAS Maintenance
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EET 2221 - UAS Sensors \& Systems
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering Technology
- PHY 1141 - College Physics I
- Data Analytics Pathway OR
- First Responders Pathway OR
- Geographic Information Pathway OR
- Precision Agriculture Pathway OR
- Entrepreneurship Pathway 9-11 Cr. $\mathbf{H r}(\mathbf{s})$.
- AVT 2700 - Aviation Internship OR
- AVT UAS Elective 1-2 Cr. $\mathbf{H r}(\mathbf{s})$.

Data Analytics Pathway

- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging

Data Analysis

- AVT 1123 - Acoustic \& CBRNE Data Analysis
- GEO 1107 - Introduction to Geographic Information Systems (GIS)

Entrepreneurship Pathway

- AVT 1115 - Introduction to UAS Entrepreneurship
- AVT 2115 - UAS Entrepreneurship Capstone
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business


## First Responders Pathway

- AVT 1108 - UAS First Responder Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1155 - Homeland Security Issues \& Administration
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory


## Geographic Information Pathway

- AVT 1114 - Geospatial Information for UAS
- CAT 1501 - Fundamentals of Surveying \& Mapping
- GEO 1107 - Introduction to Geographic Information Systems (GIS)

Precision Agriculture Pathway

- AVT 1112 - UAS Precision Agriculture
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200 - Agricultural Economics AND
- AGR 1300 - Agronomy


## Veterinary Technology, AAS

## Program Code: VET.S.AAS • Credit Hours: 65

## Description

The Veterinary Technology Program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. Most open enrollment courses must be taken prior to entry into the limited enrollment courses. To be considered for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A graduate from this program will be eligible to sit for the Veterinary Technician National Exam (VTNE.) Those graduates who pass this exam with a score of $75 \%$ or better will be eligible to register with the Ohio Veterinary Medical Licensing Board in order to practice within the State of Ohio.

NOTE: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

The Sinclair College Veterinary Technology Program is fully accredited by the American Veterinary Medical Association Committee on Veterinary Technician Education and Activities (AVMA CVTEA), effective March 28, 2019.

## Career Opportunities

The Associate of Applied Science degree in Veterinary Technology is designed to train Veterinary Technicians to assist Veterinarians in animal hospitals, laboratory research centers, referral centers, zoos, etc. A registered veterinary technician (RVT) is responsible for assisting the veterinarian in a general practice and performing essential animal care tasks. His or her job duties may include, but are not limited to: performing dental cleanings and radiologic procedures; surgical and anesthetic assistance; diagnostic laboratory techniques; IV catheter placement; patient monitoring; inventory control; and office staff management. In addition, this degree can be a stepping-stone to a 4year degree at another institution, and eventually to Veterinary School (an additional 4-year program). This program provides training in animal husbandry and restraint, nursing, surgical preparation and techniques, drug administration, anesthesia, anatomy, laboratory
techniques, and radiography. Preceptorships at various private practices and research institutions provide valuable on-the-job training. The veterinarians of the Miami Valley anticipate a need of nearly 60 registered veterinary technicians for hire annually for at least the next 5 years. This program is unique in that it places students within veterinary hospitals very early in the course of study, allowing students and hospitals alike to determine what the "best fit" will be for them within the hospital environment. Nearly all students are offered one or more jobs prior to the completion of the program.

## Program Prerequisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II AND
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I AND
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking AND
- ENG 1101 - English Composition I AND
- MAT 1130 - Mathematics in Health Sciences AND
- VET 1102 - Introduction to Veterinary Technology I AND
- VET 1202 - Introduction to Veterinary Technology II AND
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism AND
- Approval of Department


## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1103 - Test Taking Strategies
- BIO 1141 - Principles of Anatomy \& Physiology I
- BIO 1147 - Lab for Principles of Anatomy \& Physiology I
- BIO 1242 - Principles of Anatomy \& Physiology II
- BIO 1248 - Lab for Principles of Anatomy \& Physiology II
- BIO 2205 - Microbiology
- BIO 2206 - Lab for Microbiology
- CHE 1111 - Introduction to Chemistry I
- CHE 1151 - Lab for Introduction to Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- VET 1102 - Introduction to Veterinary Technology I
- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2005 - Clinical Practice II: Medical Terminology \& Ethics
- VET 2106 - Comparative Anatomy \& Physiology
- VET 2104 - Animal Husbandry \& Disease
- VET 2107 - Technical Practicum I OR
- VET 2108 - Veterinary Assistant Technical Practicum
- VET 2110 - Veterinary Parasitology
- VET 2111 - Large Animal Husbandry \& Veterinary Techniques
- VET 2113 - Laboratory for Comparative Anatomy \& Physiology
- VET 2115 - Veterinary Anesthesia \& Surgical Skills
- VET 2117 - Laboratory for Veterinary Anesthesia \& Surgical Skills
- VET 2205 - Veterinary Dentistry, Advanced Radiology \&

Diagnostic Laboratory

- VET 2207 - Technical Practicum II
- VET 2211 - Veterinary Case Studies
- VET 2250 - Veterinary Pharmacology
- VET 2300 - Preceptorship


## Visual Communications, AAS

## Program Code: VIS.S.AAS•Credit Hours: 64-65

## Description

The program prepares students for careers in visual communication which is creative, fast paced and in demand by most businesses. Students will develop the knowledge and technical skills necessary to create both printed and digital design work. This includes the design of stationery, brochures, magazines, advertising, packaging, signage, web pages, interactive media and other pieces. Creativity, problem solving and the design process are stressed. Advanced computer skills, portfolio development and job-seeking strategies are also incorporated into the curriculum.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Accreditation

Sinclair Community College has been accredited by the National Association of Schools of Art and Design (NASAD) since 2002.

## Career Opportunities

Visual Communications graduates typically pursue careers as graphic designers (print) or digital designers (interactive/web) in design studios, advertising agencies, web firms, magazine and book publishing companies, printing companies or corporate design departments. Some graduates choose to continue their education in design or a related field at a four-year institution.

## Program Requirements

- ART 2230 - Art History: Ancient through Medieval Periods OR
- ART 2231 - Art History: Renaissance through Contemporary Periods
- ART 1161 - Black \& White Darkroom Photography I OR
- ART 2265 - Digital Color Photography I
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MAT 1110 - Math for Technologists OR
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- PSY 1100-General Psychology
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1150 - Design Processes II
- VIS 1180 - History \& Theory of Graphic Design
- VIS 1210 - Design Drawing
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production
- VIS 2110 - Design Principles
- VIS 2120 - Design Applications I
- VIS 2160 - Design Applications II
- VIS 2260 - Design Portfolio
- Visual Communications Elective 3-4 Cr. $\mathbf{H r}(\mathbf{s})$.


## Visual Communications Electives

- ART 1101-2-D Foundations
- ART 1102 - 3-D Foundations
- ART 1111 - Drawing I
- ART 1141 - Introduction to Ceramics
- ART 2235 - History of Photography
- ART 2236 - History of Women Artists
- ART 2237 - History of American Art
- ART 2238 - History of African Art
- CIS 1350 - Web Site Development with HTML \& CSS
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1240 - Color Theory
- IND 2135 - Rendering
- MAN 1107 - Foundations of Business
- MRK 2100 - Foundations of Marketing
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2220 - Small Business Marketing
- MRK 2225 - Sales Fundamentals
- VIS 1320 - User Experience/User Interface
- VIS 1420 - Video Production
- VIS 2270 - Design Internship


## Associate of Individualized Study

## Associate of Individualized Study, AIS

## Program Code: AIS.S.AIS • Credit Hours: 60

## Description

The Associate of Individualized Study (AIS) degree is open to any student who wishes to design an interdisciplinary degree program using liberal arts or combining liberal arts with technical areas of study. As an alternative, part of the student's degree requirements may incorporate credit awarded through articulation agreements with community education providers or a combination of both. The student may focus specifically on education for individual development and enrichment or may design a curriculum that allows for employment or continuation into selected four-year degree programs. Note: This program requires an approved AIS application. Please contact plaprograms@sinclair.edu to complete the process. When applying for
admission to Sinclair, select the Associate of Arts (LA.S.AA) degree. Upon your AIS application being approved, you will be moved into this program of study.

## General Education

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Two of the following three areas required to total 6 semester hours

- OT36 Arts and Humanities Elective $\mathbf{3 ~ C r . ~ H r ( s ) . ~}$
- OT36 Natural and Physical Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.
- AIS Concentration $30 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- AIS Related Electives $15 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.


## Associate of Technical Study

## Associate of Technical Study, ATS

## Program Code: ATS.S.ATS • Credit Hours: 60

## Description

The Associate of Technical Study (ATS) degree is open to any student whose technical degree goals cannot be accomplished through enrollment in one of Sinclair's existing technical degree programs. The student may design a degree which combines two or more technical areas into a unique education plan. As an alternative, part of the student's degree requirements may incorporate credit awarded through articulation agreements with community education providers, or a combination of both. In all cases, faculty members assist the student in planning the most appropriate course of study for the individual. Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu to complete the process. When applying for admission to Sinclair, select the Associate of Arts (LA.S.AA) degree. Upon your ATS application being approved, you will be moved into this program of study.

## General Education

- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.

Two of the following three areas required to total 6 semester hours

- OT36 Arts and Humanities Elective $\mathbf{3} \mathbf{C r} . \mathbf{H r}(\mathbf{s})$.
- OT36 Natural and Physical Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- ATS Concentration 30 Cr . $\mathrm{Hr}(\mathrm{s})$.
- ATS Related Electives $\mathbf{1 5} \mathbf{C r}$. $\mathbf{H r}(\mathrm{s})$.


## Criminal Justice/OPOTA, ATS

## Program Code: CJS.S.ATS • Credit Hours: 62

## Description

The Associate of Technical Study Degree in Criminal Justice/OPOTA prepares entry-level professionals from diverse backgrounds in theoretical foundations, knowledge, skills, and practices of law enforcement operations. This study enables students to develop rational decisions and informed responses to challenges facing law enforcement and CJ professionals today and prepares them to take the OPOTA certification assessment which allows them to seek employment as a Peace Officer in the State of Ohio.

Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu if interested. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Deputy Sheriff, Police Officer, Park Ranger, College or University Sworn Officer

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- COM 2245 - Intercultural Communication
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective - $\mathbf{3}$ Cr. Hr.(s)
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 2226 - Criminology
- OT36 Arts and Humanities 3 Cr. Hr.(s)
- Choose one CJS elective - $\mathbf{3}$ Cr. Hr.(s)

CJS Elective

- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 1155 - Homeland Security Issues \& Administration
- CJS 1165 - Corrections
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer

Academy

- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2270 - Criminal Justice Science Internship
- CJS 2295 - Criminal Justice Science Seminar


## Firefighter EMT, ATS

## Program Code: FST.S.ATS•Credit Hours: 61

## Description

The Associate of Technical Study degree includes training by the Ohio Division of Emergency Medical Services (state accrediting body) for Firefighter I, Firefighter II, Emergency Medical Technician (EMT) and the option of including Fire Inspector and HAZWOPER Technician.
Sinclair College complies with all requirements as outlined by the Ohio Division of Emergency Services. Successful students will be eligible to sit for state certification testing and become licensed/certified Firefighter I, Firefighter II, EMT, Fire Inspector and HAZWOPER Technician. Note: This program requires an approved ATS application. Please contact plaprograms@sinclair.edu if interested. This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu.

## Career Opportunities

Students completing this program will find career opportunities in fire departments, private ambulance services, hospitals, inspection companies, and fire or emergency medical services contractor.

## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- ENG 1101 - English Composition I
- FST 1120 - Fire Safety Inspector
- FST 1125 - Fire Investigation I
- FST 1403 - Live Fire Instructor
- FST 1442 - Emergency Vehicle Operator
- FST 2209 - Fire Service Instructor
- FST 2251 - Fire Officer I
- FST 2270 - Fire Science Internship
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition OR
- FST 1104 - Firefighter II
- OT36 Arts and Humanities Elective - 3 Cr. Hr.(s)
- OT36 Social \& Behavioral Sciences Elective - 3 Cr. Hr.(s)
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective - $\mathbf{3}$ Cr. Hr.(s)


## Bachelor of Applied Science

## Aviation Technology/Professional Pilot, BAS

## Program Code: AVTP.S.BAS Credit Hours 123-126

## Description

The Bachelor of Applied Science (BAS) degree in Aviation Technology/Professional Pilot is designed to enhance the technical skills of students who have earned an associate degree in Aviation Technology/Professional Pilot at Sinclair Community College, or who wish to pursue a complete bachelors degree. Students may choose fixed wing (single engine and multi-engine) or helicopter pilot certifications. The curriculum in the Professional Pilot program is rigorous and is designed for full time students to complete in 8 semesters. Students must maintain a minimum of a 2.5 GPA . Enrollment in the flight lab courses is limited and priority will be given to full time, degree seeking students. Part time students will be admitted on a space available basis. The student must obtain a Federal Aviation Administration (FAA) 2nd class medical certificate prior to enrolling in any of the flight labs. In addition to standard tuition fees there are additional course and lab fees for each of the flight labs in the program. The flight lab fees are structured to cover the costs associated with the minimum flying hours required for each FAA certificate. Any additional flying time costs beyond the FAA minimums covered by the flight lab fee must be borne by the student. See the Department for the latest course and flight lab fee costs.

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify Registration and Student Records at studentrecords@sinclair.edu..

## Career Opportunities

Career opportunities are available in airline, corporate and general aviation. Projected overall employment growth of airline and commercial pilots from 2014 to 2024 is 5\% with $10 \%$ projected employment growth of commercial pilots from 2014 to 2024, faster than the average for all occupations. Expected job growth of 2,337 jobs in Nonscheduled Air Transportation within this sector (20122022). Five of the 25 most concentrated occupations in Aerospace require a bachelor's degree at entry.

## Program Requirements

- AVT 1105 - Orientation to Aviation
- AVT 1110 - Private Pilot Ground School AND
- AVT 1124 - Private Pilot Flight Lab - Airplane Single Engine AND
- AVT 1170 - Instrument Pilot Ground School AND
- AVT 1224 - Instrument Pilot Flight Lab - Airplane Single Engine AND
- AVT 2250 - Commercial Pilot Ground AND
- AVT 2263 - Commercial Pilot Flight Lab - Airplane Single Engine AND
- AVT 2269 - Flight Instructor Flight Lab - Airplane Single Engine OR
- AVT 1111 - Helicopter Private Pilot Ground AND
- AVT 1126 - Private Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 1171 - Helicopter Instrument Pilot Ground AND
- AVT 1226 - Instrument Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2251 - Helicopter Commercial Pilot Ground AND
- AVT 2265 - Commercial Pilot Flight Lab - Rotorcraft Helicopter AND
- AVT 2271 - Flight Instructor Flight Lab - Rotorcraft Helicopter
- AVT 1119 - Aviation Meteorology
- AVT 1140 - Introduction to Business Aviation
- AVT 1141 - Principles of Aviation Leadership
- AVT 1245 - Aviation Law
- AVT 1254 - Flight Simulator Instruction
- AVT 2125 - Developments in Aviation I
- AVT 2146 - Introduction to Airline Operations
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2211 - Advanced Navigation Science
- AVT 2240 - Human Factors in Aviation
- AVT 2242 - Aircraft Accident Investigation I
- AVT 2247 - Aerodynamics \& Flight Mechanics I
- AVT 2258 - Flight Instructor Ground
- AVT 2266 - Multi Engine Flight Lab AND
- AVT 2275 - Instrument Flight Instructor Ground AND
- AVT 2277 - Instrument Flight Instructor Flight Lab - Airplane Single Engine OR
- AVT 2275 - Instrument Flight Instructor Ground AND
- AVT 2278 - Instrument Flight Instructor Flight Lab - Rotorcraft

Helicopter

- AVT 2700 - Aviation Internship
- AVT 3125 - Developments in Aviation II
- AVT 3150 - Crew Resource Management
- AVT 3241 - Aircraft Systems
- AVT 3242 - Aircraft Accident Investigation II
- AVT 3247 - Aerodynamics \& Flight Mechanics II
- AVT 3300 - Artificial Intelligence (AI) in Aviation OR
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 4146 - Advanced Airline Operations \& Training
- AVT 4154 - Advanced Flight Simulator Instruction
- AVT 4160 - System Safety in Aviation
- AVT 4170 - Airport Operations
- AVT 4290 - Aviation Senior Capstone Project
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Arts and Humanities Elective (at least two disciplines) 6 Cr.
$\mathrm{Hr}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective (at least two disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II


## Integrated Systems Technician, BAS

## Program Code: IST.S.BAS•Credit Hours: 120-121

## Description

The Bachelor of Applied Science Integrated Systems Technician program is ideally suited to address present and future needs in manufacturing and other industries. The program focuses on training individuals in technologies related to connected devices, particularly in industrial settings. Graduates will gain the technical and robotic skills needed to effectively integrate new devices into an existing technology infrastructure, and just as critically, will gain the skills to do so in a secure way (Cyber). The program is especially well-suited to those interested in pursuing careers as mechatronics engineering technologists, who use their combined computer science and engineering skills to work with smart technologies such as robots and manufacturing equipment. The Integrated Systems Technician will be able to understand and service/maintain Advanced Manufacturing, High Tech Warehousing, Smart Consumer Devices, Household Appliances, Automotive computer systems, and Medical Devices through the process of automation and data acquisition, providing cybersecurity, movement of data to the cloud, provide data analytics/visualization and eventually to support the business systems where intelligent decisions can be made.

## Career Opportunities

Careers this degree serves include consumer markets, medical devices, defense industry, industrial high tech manufacturing automation \& warehousing/logistics, and the robotics industry. Multiple regional employers have indicated that this is a growing need for them as they deploy more interconnected devices in advanced manufacturing, warehousing, and production. Per EMSI, the number of monthly postings seeking applicants with expertise in the greater Dayton area has grown steadily and rapidly, from 35 in September of 2016 to 249 in May of 2021. Cyber technician specializing in the micro-controller consumer markets of automotive, appliances, medical devices, defense industry, industrial high tech manufacturing automation \& warehousing/logistics, and the robotics industry. Graduates will be able to work in all areas having to do with the Internet-of-Things, from programming to engineering hardware installations, networking, security, troubleshooting and repair. 60 percent of these regionally posted IOT jobs require a bachelor's degree.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals OR
- CIS 1411 - Introduction to Networks
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2428 - IoT Architecture
- CIS 2545 - Cloud Infrastructure
- CIS 2640 - Network Security
- CIS 4101 - Advanced IoT
- CIS 4102 - Cloud Native \& IoT
- CIS 4178 - Integrated Systems Technician Advanced Capstone IoT Clients OR
- CIS 4170 - Integrated Support Technician Internship
- COM 2211 - Effective Public Speaking
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1105 - Soldering Fundamentals
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2202 - Introduction to Communications Principles
- EGR 2252 - Teach Pendant Robot Programming
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- EGR 3303 - Advanced Programmable Logic Controllers II
- EGR 4101 - Modern Communication Systems
- EGR 4120 - Advanced Microprocessors
- EGR 4150 - Modern Robotics
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus OR
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence
- OT36 Social \& Behavioral Sciences Elective (must be from two discplines) $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Arts \& Humanities Elective (must be from two discplines) $6 \mathrm{Cr} . \mathrm{Hr}(\mathrm{s})$.
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II


## Nursing, BSN

## Program Code: NUR.S.BSN • Credit Hours: 120-121

## Description

The Bachelor of Science in Nursing degree is designed to fill a workforce need by optimizing the practice of registered (RN) nurses who have earned an associate degree in nursing. This RN to BSN
completion degree builds upon students' previous nursing education as well as experience working as a registered nurse. Coursework contributes to a robust understanding of leadership in evidence-based, culturally responsive nursing care to promote health, prevent disease, and improve health outcomes in individuals and populations. Students must have graduated from an accredited pre-licensure nursing program and hold a valid, unencumbered, U.S. RN license.

## Career Opportunities

The bachelor's degree in nursing augments the foundational nursing degree to enhance clinical practice and improve outcomes for nurses working in direct patient care as well as nurses in leadership and management roles in which the minimum degree requirement is a bachelor's degree in nursing. The deficit of nurses without a bachelor's degree in nursing in the Dayton region is over 700.

## Prerequisites

- Students must have graduated from a nationally accredited prelicensure nursing program and hold a valid, unencumbered, U.S. RN license.
- Students with a dismissed standing from Sinclair Community College are required to complete Sinclair's readmissions policy steps and be readmitted to the college prior to applying for the BSN program. Contact Academic Advising to learn more.


## Program Accreditation Information

Effective October 19, 2023, this program is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing.

This candidacy status expires on October 19, 2025. Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000
http://www.acenursing.com/candidates/candidacy.asp
Note: Upon granting of initial accreditation by the ACEN Board of Commissioners, the effective date of initial accreditation is the date on which the nursing program was approved by the ACEN as a candidate program that concluded in the Board of Commissioners granting initial accreditation.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 2202 - General Pharmacology
- ALH 2220 - Pathophysiology
- BIO 1141 - Principles of Anatomy \& Physiology I AND
- BIO 1242 - Principles of Anatomy \& Physiology II AND
- BIO 2205 - Microbiology
- CHE 1111 - Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I
- COM 2206 - Interpersonal Communication
- DIT 1525 - Human Nutrition
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II
- HUM 1130 - Humanity \& the Challenge of Technology
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- MAT 1450 - Introductory Statistics
- NSG 1200 - Introduction to Nursing
- NSG 1400 - Health \& Illness I: Foundational Concepts in Nursing
- NSG 1450 - Professional Nursing I: Introduction to the Role of the

Professional Nurse

- NSG 1600 - Health \& Illness II: Health \& Wellness Concepts
- NSG 1650 - Professional Nursing II: Healthcare System Concepts
- NSG 2400 - Health \& Illness III: Health \& Wellness Concepts
- NSG 2450 - Professional Nursing III: Leadership \& Management of Care
- NSG 2600 - Concept Synthesis
- NSG 3101 - Nursing Theory
- NSG 3103 - Nursing Evidence-Based Practice
- NSG 4101 - Community Nursing
- NSG 4102 - Cultural Competency
- NSG 4110 - Nursing Leadership
- NSG 4120 - RN to BSN Capstone
- PHI 2206 - Introduction to Ethics
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development
- SOC 1101 - Introduction to Sociology
- SOC 2205 - Social Problems
- Nursing Elective 6 Cr. Hrs.

Nursing Electives

- NSG 4103 - Informatics for the Professional Nurse
- NSG 4104 - Advanced Health Assessment \& Health Promotion
- NSG 4105 - Population Health
- NSG 4106 - Women's Health
- NSG 4107 - Academic Nurse Educator


## Unmanned Aerial Systems, BAS

## Program Code: UAS.S.BAS Credit Hours 120-124

## Description

This Bachelor of Applied Science (BAS) degree in Unmanned Aerial Systems (UAS) is designed to fill a growing workforce need by developing the technical skills of students and prepare them for jobs in this high demand industry. The degree provides a foundational understanding of UAS mission planning, advanced flight operations, hands-on maintenance, laws and regulations, data analytics, sensor operations and technology integration and testing in support of diverse industries. These include precision agriculture, infrastructure inspection, aerial mapping and surveying, first response, logistics, security, and other emerging applications that will continue to develop as the industry grows. Students will prepare for and conduct unmanned flights similar to those commonly performed in the industry observing

Federal Aviation Administrations (FAA) regulations that govern UAS operations.

## Career Opportunities

More than 100,000 new jobs in UAS related fields are predicted nationwide by 2025. A technical baccalaureate degree in Unmanned Aerial Systems (UAS) will prepare the graduate to work in a variety of roles including UAS operations, maintenance, data analysis, sensor operations, technology integration and testing, and basic manufacturing in support of diverse industries including precision agriculture, infrastructure inspection, aerial mapping and surveying, first response, logistics, security, and other emerging applications that will continue to develop as the industry grows.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1246-Air Traffic Control Communications
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- AVT 2240 - Human Factors in Aviation
- AVT 2279 - Unmanned Aerial Systems Project
- AVT 2280 - Introduction to UAS Maintenance
- AVT 2700 - Aviation Internship


## Choose one UAS track from:

- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis AND
- AVT 1123 - Acoustic \& CBRNE Data Analysis OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1108 - UAS First Responder Applications AND
- CJS 1101 - Introduction to Criminal Justice Science AND
- CJS 1155 - Homeland Security Issues \& Administration AND
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory OR
- AVT 1114 - Geospatial Information for UAS AND
- CAT 1501 - Fundamentals of Surveying \& Mapping AND
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- AVT 1112 - UAS Precision Agriculture AND
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200 - Agricultural Economics AND
- AGR 1300 - Agronomy OR
- AVT 4215 - Autonomous Systems in Aviation AND
- CIS 2266 - Python for Data Analytics AND
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence OR
- AVT 1115 - Introduction to UAS Entrepreneurship AND
- AVT 2115 - UAS Entrepreneurship Capstone AND
- MAN 1107 - Foundations of Business AND
- LAW 1101 - Business Law
- AVT 3100 - Contemporary Technical, Legal \& Regulatory Issues in UAS
- AVT 3151 - UAS Operations II
- AVT 3152 - UAS Operations II Lab
- AVT 3200 - UAS Logistics
- AVT 3300 - Artificial Intelligence (AI) in Aviation
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 3500 - UAS Design Concepts
- AVT 4151 - Unmanned Systems Mission Planning
- AVT 4210 - Advanced UAS Maintenance
- AVT 4220 - Human Autonomy Teaming in Aviation
- AVT 4270 - UAS Internship II
- AVT 4279 - Unmanned Aerial Systems Senior Project
- COM 2211 - Effective Public Speaking
- ECO 2160 - Principles of Macroeconomics
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EET 2221 - UAS Sensors \& Systems
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1131 - Personal Computer Applications for Engineering

Technology

- OT36 Any Group 3 Cr. Hr(s).
- OT36 Arts and Humanities Elective (from two or more disciplines) 6 Cr. $\mathrm{Hr}(\mathrm{s})$.
- OT36 Social and Behavioral Sciences Elective (from two or more disciplines) $6 \mathbf{C r} \mathbf{H r}(\mathbf{s})$.
- PHY 1141 - College Physics I
- PHY 1142 - College Physics II
- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis AND
- AVT 1123 - Acoustic \& CBRNE Data Analysis OR
- Unmanned Aerial Systems elective


## Certificate Programs

## Certificate

## Advanced Precision Machining, CRT

## Program Code: CAMAPM.S.CRT • Credit Hours: 30

## Description

This program provides any student whether working full time, raising a family, or going to college, the ability to pursue the exciting and indemand career of precision machining. Recent events have shown that these careers are essential in nature and can offer employment when others do not. Starting from basic machining through advanced machining, close tolerance grinding, introduction into the world of CNC and Conversational programming, the production of detail parts
and then their fit and assembly into a working product. This program will ready the student for a wide variety of manufacturing careers through development of the skills and traits that manufacturers are looking for. This program can be started in any semester.

## Career Opportunities

Careers are available for entry-level in a wide variety of manufacturing careers which include, but are not limited to, the precision machining and tool-and-die industries. The Work- Based Learning Internship opportunity gives students a host of opportunities beyond the classroom.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1142 - Advanced Shop Floor Math
- CAM 2145 - Shop Floor Programming
- CAM 2700 - Computer Aided Manufacturing Internship
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Advanced Quality, CRT

Program Code: ADQ.S.CRT • Credit Hours: 33-35

## Description

This advanced certificate will provide the student with the Basic Quality Certificate and then advance them further in the Quality field covering Advanced Metrology and Gauging used in various fields. Quality Assurance and Quality Control principles will be introduced to include the elements of different inspection categories, material conformance, sampling techniques, traceability methods, and the relationship to PPAP/First Article submission. The last major components of this certificate are Quality Management Systems \& Auditing as it relates to industry standards such as ISO, TS, FDA, and the Medical Device industries.

## Career Opportunities

Quality is in everything we do and the need for Quality technicians and personnel is growing every day. The courses in this certificate will give the student an upper-level hands-on experience of what it takes to work with many of the requirements of today's Quality technicians and managers.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1310 - Advanced Metrology \& Gauging
- ISE 1313 - Coordinate Measurement
- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2310 - Quality Assurance
- ISE 2360 - Quality Management Systems \& Auditing
- MAT 1470 - College Algebra OR
- MAT 1570 - Analytic Geometry \& Trigonometry


## Advanced Video Production, CRT

Program Code: VIDP.S.CRT•Credit Hours: 32

## Description

This one-year certificate introduces students to video production, including lighting and cinematography, motion design, video editing, and audio production. Students will learn the design process, including use of digital photography, appropriate applications; and, video and audio equipment to create quality videos.

## Career Opportunities

There are various career paths in video production. You could work in television, advertising, or news reporting. You also could apply your skills in education, government, or business industries. Within these settings, you could hold positions in a variety of positions, such as a video editor, camera operator, audio editor, live stream operator, or motion graphics. There are also freelance videographer opportunities.

## Program Requirements

- ART 2265 - Digital Color Photography I
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design
- VIS 2130 - Motion Design


## Advanced Web Design, CRT

## Program Code: WEBDES.S.CRT • Credit Hours: 32

## Description

This one-year certificate introduces students to web coding and design, including conceptualizing, designing, developing, and maintaining websites. Students will also learn UX/UI, motion design, and working with a web content management tool. Students will learn a variety of web concepts and digital design applications.

## Career Opportunities

Web designers develop, create, and test website or interface layout, functions, and navigation for usability. Web Designers typically work for corporations across industries, but they can also work for web design agencies or as self-employed individuals. They work closely with software and marketing professionals to make sure websites are designed coded correctly. Still others work in industries including publishing, management consulting, and advertising.

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1210 - Design Drawing
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design
- VIS 2130 - Motion Design
- VIS 2170 - Web Content Management


## Agribusiness Greenhouse Management, CRT

## Program Code: AGM.S.CRT•Credit Hours: 33

## Description

The Agribusiness Greenhouse Management certificate will prepare students for a successful business career in industries related to the food and agricultural system including input markets, farm production, greenhouse management, food manufacturing and distribution, and food and plant retailing. This program provides a broad-based study of the successful production of food, plants, and other agricultural products and will help students develop the skills for decision making and an understanding of the agricultural-food system dynamics. Upon completion, students will have the knowledge to enhance their contributions to agricultural enterprises or initiate their own entrepreneurial ventures.

## Career Opportunities

Job opportunities for this certificate include greenhouse manager, farm manager, grain and livestock buyer, crop producer, marketing head, quality controller, urban landscaper, inventory technician, landscape enhancement manager, landscape technician, etc.

## Program Requirements

- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1204 - Plant Propagation
- AGR 1206 - Horticulture II
- AGR 1208 - Sustainable Landscape Design
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior


## Agricultural Technology, CRT

## Program Code: AGR.S.CRT • Credit Hours: 31

## Description

The certificate will prepare students for employment in various areas of agriculture. Completers of this certificate will gain additional expertise in areas including agronomy, large animal science, agricultural economics, retail and customer service.

## Career Opportunities

Potential employment in agriculture includes agricultural technician, farm operations, farm retail, farm bureau representative or farm assistant.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} \mathbf{~ H r}(\mathbf{s})$.
- AGR 1300 - Agronomy OR
- AGR 1110 - Introduction to Large Animal Sciences: Handling \& Husbandry
- OT36 Arts and Humanities Elective 3 Cr. Hr(s). OR
- OT36 Natural and Physical Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- LAW 1101 - Business Law AND
- AGR 1200 - Agricultural Economics OR
- AGR 1111 - Principles of Large Animal Reproduction AND
- AGR 1112 - Principles of Large Animal Nutrition


## Airframe Aviation Maintenance, CRT

## Program Code: AAM.S.CRT • Credit Hours: 31

## Description

The Airframe Aviation Maintenance certificate provides the knowledge and skill required by the Federal Aviation Administration (FAA) for the airframe maintenance technician student. Students will learn to apply the knowledge and skills covering the required sections of training for the Airframe certificate as required by the Federal Aviation Administration under Part 147 Appendix C. Those subjects include assembling and rigging, metallic and non-metallic structures, fuel systems, electrical power production and distribution, instruments, communication/navigation systems, cabin atmospheric control systems, landing gear, hydraulics and pneumatics, fire protection systems, aircraft finishing, ice protection systems and welding inspections.

Boeing Commercial Aircraft Company recently predicted 1,000,000 more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next $15-20$ years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1106 - Airframe Safety Systems
- AVT 1107 - Fuel Systems
- AVT 1133 - Instruments/Communications
- AVT 1136 - Sheet Metal
- AVT 1214 - Cabin Atmospheric Control
- AVT 1218 - Utility Systems
- AVT 2121 - Assembly \& Rigging
- AVT 2132 - Airframe Electrical Systems
- AVT 2236 - Non-Metallic Structures


## Architectural Design Technician, CRT

## Program Code: ARCD.S.CRT • Credit Hours: 34

## Description

This program helps students develop residential and commercial architectural design skills. Design courses are combined with construction materials and building systems courses, providing a broad foundation for entry level architectural design work. Students will receive training to help them create and understand architectural drawings as well as proper use of building materials and components. Upon completion, students will be able to utilize various design and analysis software to assist with the development of architectural projects.

## Career Opportunities

Graduates are employed as designers and drafters for architectural and design-build firms. Many opportunities also exist in the building materials and assemblies' sales and supply area.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1121 - Architectural Graphics II
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 1341 - Architectural Design I
- CAT 2101 - Architectural Design II
- CAT 2201 - Architectural Visualization
- CAT 2431 - OSHA Construction Standards
- EGV 1301 - Architectural Energy Analysis
- IND 1234 - Materials \& Textiles
- VIS 1140 - Design Processes I


## Architectural Project Technician, CRT

## Program Code: ARCP.S.CRT • Credit Hours: 30

## Description

This program is designed to build skills required for managing architectural projects in a variety of professional settings. Students will receive training to help them understand architectural practice, including an understanding of building materials and components, the financial aspects of project management, and the management skills necessary to deal with the diverse population of the industry. Upon completing this program, students will be qualified to move into project management positions in architecture and similar businesses.

## Career Opportunities

Graduates are employed as project managers in the architecture and construction industry. Many opportunities exist in the building materials and assemblies sales and supply area.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- CAT 1201 - Construction Methods \& Materials
- CAT 1241 - Building Systems
- CAT 2431 - OSHA Construction Standards
- CAT 2401 - Construction Project Management
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management
- COM 2211 - Effective Public Speaking
- EGV 1301 - Architectural Energy Analysis
- ENG 1101 - English Composition I


## Automotive Technology, CRT

## Program Code: AUT.S.CRT • Credit Hours: 37

## Description

The Automotive Certificate program is designed for students who want to become automotive technicians without pursuing an associate degree. Students will expand their knowledge of the automotive service industry and secure employment with dealerships, independent service shops, machine shops and other corporate service jobs. .

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in dealerships, independent shops and automotive machine shops. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors. Graduates with practical experience, education, willingness
to work and a high degree of professionalism may expect to find jobs in middle management or research occupations within major automotive corporations.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1108 - Automotive Engine Systems
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1115 - Automotive Engine Performance I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1142 - Automotive Manual Transmission \& Driveline
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems
- AUT 2214 - Automotive Electrical/Electronic Systems II
- AUT 2215 - Automotive Engine Performance II
- AUT 2241 - Automatic Transmission Systems


## Bakery Operations and Pastry Skills, CRT

## Program Code: BOP.S.CRT • Credit Hours: 35

## Description

This one year certificate focuses on basic baking as well as advanced techniques including bread making, pastry, and confections (such as chocolate work, sugar sculptures, and more).

## Career Opportunities

This certificate provides career opportunities in businesses that specialize in Breads, Fine Pastries, Chocolates, Candy's, restaurants, and the opportunity to be self-employed.

## Program Requirements

- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2118 - Artisan Breads
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional


## Basic Manufacturing, CRT

Program Code: BMFG.S.CRT • Credit Hours: 31

## Description

This certificate in Basic Manufacturing prepares the student for entry level positions in any of the following five: General Manufacturing, Computer Aided Manufacturing, Automation Technology, Mechanical Engineering Technology, and Industrial Engineering Technology. Completion of this certificate prepares the student to earn the Industry Recognized MSSC - Certified Production Technician Certificate.

## Career Opportunities

Basic Manufacturing prepares the student for entry level positions in any of the five areas within General Manufacturing, Computer Aided Manufacturing, Automation Technology, Mechanical Engineering Technology, and Industrial Engineering Technology. Completion of this certificate prepares the student to earn the Industry Recognized MSSC - Certified Production Technician Certificate.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing
- MET 1131 - Personal Computer Applications for Engineering Technology
- MET 1161 - Software Tools for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD


## Bioscience Lab Skills, CRT

## Program Code: BLS.S.CRT•Credit Hours: 30-32

## Description

The Bioscience Lab Skills certificate will prepare students for internships and some entry level jobs in bioscience laboratories. The students will learn the background of the biotechnology industry, basic lab safety and regulation, and the practical math needed to calculate reagents, dilutions and sample analysis.

## Program Requirements

- BIO 1107 - Human Biology
- BIO 1108 - Lab for Human Biology
- BIO 1111 - General Biology I AND
- BIO 1117 - Lab for General Biology I OR
- BIO 1171 - Principles of Biology I
- BIS 1120 - Introduction to Software Applications
- BTN 1110 - Biotechnology \& Bioethics
- BTN 1120 - Laboratory Safety \& Regulatory Compliance
- BTN 1130 - Biological Reagents Preparation
- BTN 1131 - Lab for Biological Reagents Preparation
- BTN 1201 - Biotechnology Careers
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I OR
- CHE 1211 - General Chemistry I AND
- CHE 1251 - Lab for General Chemistry I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- MAT 1470 - College Algebra


## Business Foundations Specialist, CRT

Program Code: BFS.S.CRT • Credit Hours: 33

## Description

This certificate takes the Entrepreneurship and Business Foundations STC one step further by preparing existing or potential entrepreneurs with background issues in skills such as customer service and negotiation techniques by addressing the application of basic principles of negotiation through the introduction and analysis of the negotiation process, case studies, and simulations. This certificate contains foundational courses that apply towards AAS in Business Management/Entrepreneurship.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own business or to work in larger companies in an entrepreneurial role.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2144 - Negotiation Techniques
- MRK 2220 - Small Business Marketing
- SOC 1101 - Introduction to Sociology


## Business Information Systems/Information Processing, CRT

Program Code: BUIP.S.CRT • Credit Hours: 30

## Description

This one-year certificate is intended to provide advanced software application training necessary to work improve efficiency and productivity and aid in business decision making.

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I


## Business Information Systems/Medical Office Specialist, CRT

## Program Code: BUMS.S.CRT•Credit Hours: 32

## Description

In this one-year certificate, students will work with various software applications, learn medical terminology, and take medical office and customer service courses that prepare them to work in a medical office environment.

## Career Opportunities

Employment opportunities include medical office receptionists, secretaries, billing/insurance clerks, and medical office administrators in physician's offices, urgent care centers, managed care organizations, laboratories, nursing homes and hospitals.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- BIS 2180 - Medical Office Simulation
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- OT36 Mathematics Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$. OR
- MAT 1120 - Business Mathematics


## Business Information Systems/Personal Computers in Business, CRT

## Program Code: PCB.S.CRT • Credit Hours: 30

## Description

This one-year certificate is intended for those who want to update their knowledge of software applications and personal computer technology. Students will learn how to use personal computers for business administration, decision support and financial applications.

## Career Opportunities

Employment opportunities include paraprofessional positions in information technology, customer service and personal computer software application troubleshooting.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1131 - Business Writing
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior


## Business Management, CRT

## Program Code: BM.S.CRT • Credit Hours: 30

## Description

Students gain an understanding of business procedures to prepare them for a management position or update the management skills of those currently employed in a managerial, administrative or office support role.

## Career Opportunities

Students completing this certificate can expect to be prepared to work as supervisors or entry-level managers in retail, manufacturing or medium and small businesses.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking
- ECO 1100 - Introduction to Economics OR
- ECO 2180 - Principles of Microeconomics
- ENG 1131 - Business Writing
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MAN 1107 - Foundations of Business
- MAN 1110 - International Business
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- Business Management Elective $\mathbf{3} \mathbf{C r} \mathbf{~ H r}(\mathbf{s})$.


## Business Management Electives

- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency Identification Technology
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2220 - Small Business Marketing
- MRK 2225 - Sales Fundamentals


## Business Transfer, CRT

## Program Code: BUS.S.CRT • Credit Hours: 30

## Description

This certificate is designed for the student who desires to complete Transfer Assurance Guide (TAG) courses to transfer into a four-year business program. This certificate can be used to help students from non-business backgrounds begin preparation for entrance into a Masters of Business Administration (MBA) program by packaging the prerequisite business core courses into a convenient certificate offering. Additionally, students wanting to pursue a two-year business degree or needing to augment current work skills with academic credentials may find this certificate beneficial.

## Career Opportunities

Employers more often than in the past require four-year business degrees or evidence that students are in the process of earning these credentials. This certificate serves as a credentialing tool for students to use in their career search, as well as, for currently employed students to show further evidence of growth and academic progress toward a bachelor's degree in business.

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- ENG 1131 - Business Writing
- MRK 2101 - Principles of Marketing Management
- LAW 1101 - Business Law
- OT36 Arts and Humanities Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- OT36 Social and Behavioral Sciences Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.


## Community and Public Services Specialist, CRT

## Program Code: CSS.S.CRT • Credit Hours: 30

## Description

The certificate takes the Social Service Assistant certificate one step further by preparing students to work in a variety of settings.

## Career Opportunities

Community and Social Service Specialist fob duties typically include working under the supervision of a program director, director of social services, social worker, or similar title.

## Program Requirements

- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1106 - Transition Skills
- CJS 2145 - Correctional Case Management
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary OR

- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- CJS 1165-Corrections OR
- SOC 2130 - Sociology of Family Violence OR
- SOC 2205 - Social Problems
- CJS 2111 - Ethics \& Professionalism in Criminal Justice OR
- SOC 1145 - Introduction to Cultural Anthropology
- ENG 1131 - Business Writing OR
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior
- LAW 1101 - Business Law OR
- SOC 2226 - Criminology

Community Health Worker, CRT

## Program Code: AHCN.S.CRT • Credit Hours: 31-32

## Description

The Community Health Worker program curriculum is designed to prepare the student for employment as community health workers, patient navigators, and health insurance navigators. The aim of this certificate is to provide individuals with the expertise and experience in assisting individuals and communities to navigate the U.S. community health, health care and health insurance systems. The certificate offers a combination of classroom, lab and practical training that will help the student succeed in their future career. A portion of this program will involve 210 hours of non-paid practice at various facilities. A State and Federal Background check will be required prior to starting the clinical practice.

## Career Opportunities

Community Health Workers will be educated to obtain the expertise and experience in assisting individuals and communities to navigate the U.S. community health, health care, and health insurance systems, as well as to improve the equality and cultural competence of service delivery and accomplish personal prevention and health care goals.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1105 - Overview of Holistic Health
- ALH 1107 - Core Concepts of Public Health
- ALH 1250 - Health Science Practicum
- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- MAS 1102 - Clinical Medical Assisting I OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe OR
- ALH 1120 - Nurse Aide Training
- MHT 1101 - Introduction to Mental Health Services
- PSY 1100 - General Psychology
- PSY 2200 - Lifespan Human Development


## Community Service Support, CRT

## Program Code: SWT.S.CRT • Credit Hours: 32

## Description

Students gain a better understanding of various sociological topics and how social problems can impact their communities. This certificate provides the knowledge and skills to provide assistance to Social Work and Social Service Professionals in the field and may perform duties such as providing information or referring individuals to public or private agencies for assistance, interviewing individuals or family members to compile information on social, educational, criminal, institutional, or substance abuse history; and advising clients regarding food stamps, child care, and transportation. Job duties may include transportation, visitation supervision, documentation, detention
monitoring, school enrollments etc. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.m.

## Career Opportunities

A graduate of the Community Service Support certificate is employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve a degree in the Community and Public Service AAS or an AA in Social Work with additional coursework.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 2138 - Ethical Issues in the Helping Professions
- SOC 1101 - Introduction to Sociology
- SOC 1145 - Introduction to Cultural Anthropology
- SOC 2205 - Social Problems
- SOC 2226 - Criminology
- SWK 1206 - Introduction to Social Work
- OT36 Arts and Humanities $\mathbf{3}$ Cr. Hr.(s)


## Computer Support Technician, CRT

## Program Code: SUP.S.CRT • Credit Hours: 31

## Description

Computer Support Technicians provide first level support for users on computers, software, mobile devices and other devices connected to a network. Students will learn to provide technical support and problemsolving of operating systems, computer networks, software applications, and will utilize interpersonal communication and customer service fundamentals. Students will have the opportunity to earn A+ certification, Microsoft Office Specialist (MOS) certifications and customer service certification in specific courses in the curriculum.

## Career Opportunities

Program prepares students to for entry-level positions as computer support technician, desktop support technician, IT help desk technician/representative, customer support specialist, technical support specialist, or IT service desk specialist/technician.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- BIS 1400 - Customer Service
- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2731 - A+ Hardware \& Software
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1131 - Business Writing


## Corrections, CRT

## Program Code: COR.S.CRT • Credit Hours: 33

## Description

This certificate is designed to provide the student with the basics necessary for entry-level employment in a correctional environment. All courses can be applied to the Associate of Applied Science Degree in Corrections, if desired.

## Career Opportunities

There are openings in local and state correctional facilities, local nonprofit agencies providing correctional services, as well as employment through private prison corporations.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer Academy
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- SOC 1101 - Introduction to Sociology


## CPA Exam Eligibility: Business Component, CRT

## Program Code: CPABUS.S.CRT•Credit Hours: 30

## Description

In order to be eligible to sit for the CPA examination in the state of Ohio, a candidate must fulfill the basic requirements in both business
and accounting courses. This certificate is designed for the student to obtain the business courses necessary to sit for the CPA exam. It will provide the pathway for a student who has earned a non-business bachelor's degree to transition to a career in accounting.

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- BIS 1120 - Introduction to Software Applications
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- LAW 1101 - Business Law
- MAN 2150 - Management \& Organizational Behavior
- Accounting Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.
- MRK 2101 - Principles of Marketing Management


## Accounting Electives

- BIS 1260 - Database Software
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1130 - Network Fundamentals
- CIS 1350 - Web Site Development with HTML \& CSS
- ENT 2140 - Small Business Finance
- FIN 2450 - Personal Finance
- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2155 - Management Information Systems
- MRK 2135 - Digital Marketing
- MRK 2225 - Sales Fundamentals


## Culinary Management, CRT

## Program Code: CM.S.CRT • Credit Hours: 31

## Description

This certificate takes the Food Production Specialist short-term certificate one step further by preparing students for management positions in the catering and food service industry. This certificate highlights customer service skills by incorporating concepts of the American business system and basic principles of the free market system along with fundamental tenets necessary for understanding management, motivation, and behavior in organizational settings. This certificate contains foundational courses that apply towards an Associate of Applied Science in Hospitality Management and Tourism/Culinary Arts.

## Career Opportunities

The restaurant industry is open to ex-offenders and is one of the fastest growing fields in the service sector of a global economy, 16.5 million people are currently working in this industry

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- HMT 1101 - Basic Culinary Skills
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2215 - Hospitality Cost Controls
- MAT 1120 - Business Mathematics


## Culinary Skills and Food \& Beverage Operations, CRT

## Program Code: CSFO.S.CRT • Credit Hours: 36

## Description

This one-year certificate focuses on back-of-the-house talents in culinary arts as well as the skills necessary to operate and oversee front-of-house tasks in most food \& beverage operations.

## Career Opportunities

This certificate provides career opportunities in the businesses of Food Trucks, Restaurants, College \& University Food outlets, as well as Hospital Food outlets, Grocery Stores, etc., and the opportunity to be self-employed. This certificate is not only skills oriented, but also has supervisory components as well.

## Program Requirements

- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1125 - Beverage Management
- HMT 1129 - Restaurant Desserts
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2207 - Butchery \& Fish Management
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional


## Cyber Investigation, CRT

## Program Code: CYSEC.S.CRT•Credit Hours: 33-34

## Description

Students will learn computer network protection, maintenance and usage of computer hardware and software, management of networks and operating systems, and criminal and constitutional law and IT criminal investigation, which includes evidence procedures and computer forensics.

## Career Opportunities

The Cyber Investigation Certificate will prepare students for careers in the areas of computer network protection, managing networks and operating systems and IT criminal investigation, which includes evidence procedures and computer forensics. Job titles include but are not limited to: Intelligence Analyst, IT Specialist (Government Breakout Codes 2210), Systems Administrator, Network Engineer, Information System Security Manager, Cyber Security Incident Response Specialist and Private Investigator.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- CIS 2808 - Introduction to Computer Forensics
- CIS 2550 - Linux Operating System OR
- CIS 2731 - A+ Hardware \& Software
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2209 - Computer Crime
- CJS 2295 - Criminal Justice Science Seminar


## Data Analytics, CRT

## Program Code: DA.S.CRT•Credit Hours: 33

## Description

This certificate prepares students for entry-level data analytics positions requiring knowledge, setup and usage of business intelligence and data analysis solutions. Data analytics is expanding in businesses, government agencies and not-for-profit organizations, enabling them to make better decisions utilizing appropriate data and information. Students will have the ability to structure data and prepare reports in a way that is meaningful to business, government agency and not-forprofit organization users. Course work will include database concepts, data modeling, SQL, data analysis, data mining tools, mathematical and statistical techniques, project management and systems analysis.

Emphasis is placed on strong communication skills necessary to interact with key users and understand their requirements.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts and network engineers.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2170 - Computer Information Systems Internship
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions
- MAT 1455 - Introduction to Data Science
- MAT 2170 - Business Statistics I
- MAT 2180 - Business Statistics II


## Data Literacy Foundation, CRT

## Program Code: DL.S.CRT • Credit Hours: 32

## Description

This certificate will prepare students to work in a business setting and assist a data technician or data scientist with data management. Students will learn how to collect, interpret, analyze, and turn raw data into meaningful, actionable insights. Students will gain the programming, math, visualization, and technical skills needed to solve specific problems and challenges within an organization. A data literate person has the ability to read, work with, analyze, and argue with data.

## Career Opportunities

Include the following: Data Analyst, Business Analyst, Data Analytics Manager, Business Intelligence Analyst and Data Mining Specialist.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- CIS 1130 - Network Fundamentals
- CIS 1160 - Introduction to Data Literacy
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2267 - Advanced Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- MAT 1455 - Introduction to Data Science

Program Code: MRK.S.CRT•Credit Hours: 33

## Description

Digital Marketing professionals are essential in helping businesses and organizations establish and cultivate a strong Internet presence. Students will develop a basic understanding of critical components of a digital marketing campaign such as marketing technologies, advertising and public relations, sales fundamentals and lead generation, customer engagement and social media, as well as marketing segmentation tools including geographic information systems. Students will have the opportunity to learn new media theories and marketing approaches while gaining hands on experience with digital marketing tools.

## Career Opportunities

Digital marketing specialists have opportunities for marketing communications, technical and management positions at all levels of virtually every type of business including small and medium-sized businesses, advertising agencies, global corporations, non-profit organizations and even government agencies.

Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- MAN 1107 - Foundations of Business
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2145 - Principles of Retailing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2250 - Digital Marketing Analytics


## Digital Marketing Technologies, CRT

## Program Code: MRKTEC.S.CRT • Credit Hours: 31

## Description

The Digital Marketing Technologies certificate will provide students with both theoretical and practical applications of digital marketing strategies and tools. This certificate will cover the foundational concepts in digital marketing including fundamental marketing concepts, advertising strategies, digital marketing approaches and tools, retailing and e-commerce, customer engagement and social media, graphic design, website development, consumer behavior and a marketing internship.

Students completing this certificate may obtain an entry level position in digital marketing with state and/or local government, small, medium or large sized businesses, and non-profit organizations.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CIS 1350 - Web Site Development with HTML \& CSS
- MAN 1107 - Foundations of Business
- MAN 2270 - Management Internship
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2102 - Principles of Advertising
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2236 - Consumer Behavior
- VIS 1140 - Design Processes I


## Energy Technology, CRT

## Program Code: ENRGY.S.CRT•Credit Hours: 30-31

## Description

This program is intended for students who are interested in an entrylevel position in the field of energy services. This program consists of HVAC, energy analysis and management, energy services and renewable energies courses.

## Career Opportunities

Energy technicians who can perform energy audits and test structures for energy efficient characteristics are in increasing demand.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1601 - Building Electric \& Controls
- EGV 1101 - Alternate \& Renewable Energy Sources
- EGV 1251 - Introduction to Energy Management Principles
- EGV 1301 - Architectural Energy Analysis
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- EGV 2700 - Energy Management Technology Internship
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings


## Entrepreneurship, CRT

## Program Code: ENT.S.CRT•Credit Hours: 33

## Description

This certificate prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to traditional management courses, the following key areas are emphasized for entrepreneurs: financial plan development, marketing plan development and business plan development.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own businesses or to work in larger companies in an entrepreneurial role.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication OR
- COM 2286 - Public Relations Principles
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MRK 2220 - Small Business Marketing
- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management OR
- MRK 2135 - Digital Marketing


## Fine Art Photography, CRT

## Program Code: PHOT.S.CRT • Credit Hours: 30

## Description

The Fine Art Photography Certificate is designed for the student seeking a career as a fine artist. The certificate serves as a stand-alone program of study for individuals wishing to open photography studios or as a complementary base for students intending to complete the Associate of Arts, Art degree and continue their studies at four-year colleges and universities. The certificate ensures students gain a strong visual knowledge of current and historical photographic mediums. Students are exposed to studio photography, studio lighting techniques, alternative processes, darkroom-based and digital photography. This program maintains a strong foundation in film-based processes and darkroom printing techniques. The student will learn to operate small format 35 mm , medium format 120 , large format manual film cameras as well as digital camera operation. Basic computer imaging techniques will also be addressed.

## Career Opportunities

The Fine Art Photography Certificate prepares students to open their own photography studios or to transition into the Associate of Arts, Art degree program, where upon completion, they may continue their studies at four-year colleges, universities, or standalone art schools.

## Program Requirements

- ART 1161 - Black \& White Darkroom Photography I
- ART 1162 - Black \& White Darkroom Photography II
- ART 1170 - Alternative Photographic Processes
- ART 1171 - Studio Photography
- ART 1175 - Computer Photography
- ART 2235 - History of Photography
- ART 2265 - Digital Color Photography I
- ART 2294 - Photography Portfolio Development
- CHE 1011 - Chemistry in Modern Life for General Education
- CHE 1051 - Lab for Chemistry in Modern Life for General

Education

- MAT 1110 - Math for Technologists OR
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1445 - Quantitative Reasoning


## Food Service Management, CRT

## Program Code: FSM.S.CRT • Credit Hours: 35

## Description

The Food Service Management certificate program combines classroom instruction and laboratory experience in food preparation and service for the restaurant and hotel/lodging industry.

## Career Opportunities

The Food Service Management certificate program is designed to provide the initial knowledge for a student to begin at a management trainee level within a corporate or franchise food service operation. With further training and experience, the student should be able to accept more responsibility at a store manager's level.

## Program Prerequisite(s)

- HMT 1107 - Sanitation \& Safety


## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- ENG 1101 - English Composition I
- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2225 - Hospitality \& Tourism Supervision
- HMT 2226 - Hospitality Purchasing \& Negotiations
- MAT 1125 - Math for the Culinary Arts \& Baking \& Pastry Arts Professional
- PSY 1100 - General Psychology OR
- SOC 1145 - Introduction to Cultural Anthropology


## Health Information Management Technician, CRT

## Program Code: HIMT.S.CRT•Credit Hours: 30

## Description

The Health Information Management Technician certificate prepares students to work in a medical office setting. This certificate will focus on preparing students for an entry-level office position in a medical facility where basic electronic health record technology, medical terminology, medicolegal principles and revenue-cycle principles are utilized. A grade of "C" or higher is required in all courses to receive the certificate.

## Career Opportunities

Healthcare record scanners, record clerks, receptionists, medicolegal technicians, patient-registration clerks, long-term care HIM positions, hospice HIM positions, insurance companies and healthcare facilities clerk.

## Program Requirements

- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- BIS 1221 - Specialized Computer Applications for Health

Information Management

- HIM 1101 - Medical Terminology
- HIM 1110 - Health Information Processing
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- HIM 2145 - Health Information Resource Management
- HIM 2165 - Healthcare Data in Reimbursement
- HIM 2233 - Healthcare Information Systems


## Histotechnology, CRT

## Program Code: HT.S.CRT • Credit Hours: 33

## Description

The one-year technical certificate program in Histotechnology (HT) prepares students to enter the workforce as Histology Technicians. In this profession, graduates will be specialized clinical laboratory professionals who work in a hospital laboratory setting processing patient tissue samples onto microscopic slides for pathologists to examine for diagnostic or research purposes. This certificate program consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Student Information packet located on the webpage. Students will have a maximum of three opportunities to successfully complete all general education courses required by the program. All course withdrawals (W) or failures (D) or (F) will count as an attempt. After a third unsuccessful attempt, the student is no longer eligible to enter or continue in the program. Note: For students under age 18 there
may be restrictions on participating in certain Health Sciences programs. Note: Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Accreditation

Accreditation with the National Accrediting Agency for Clinical Laboratory Science (NAACLS) is currently in process.

## Career Opportunities

Histology Technicians have a unique combination of theoretical and technical skills that make them employable in a number of job environments including hospital laboratories, clinics, research laboratories, industry, sales, technical support, administration and education. Employment of clinical laboratory technologists and technicians is projected to grow 5 percent from 2022 to 2032, faster than the average for all occupations. About 24,000 openings for clinical laboratory technologists and technicians are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Clinical Laboratory Technologists and Technicians, at https://www.bls.gov/ooh/healthcare/clinical-laboratory-technologists-and-technicians.htm (visited September 14, 2023).

## Program Pre-requisite(s)

- ALH 1101 - Introduction to Healthcare Delivery AND
- BIO 1121 - Human Anatomy \& Physiology I AND
- CHE 1111 - Introduction to Chemistry I AND
- CHE 1151 - Lab for Introduction to Chemistry I AND

Minimum GPA of $>2.7$ AND
Pass a criminal background check AND
Students cannot be color blind for this certificate AND
Vaccines required for practicum

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- CHE 1111 - Introduction to Chemistry I
- CHE 1151 - Lab for Introduction to Chemistry I
- CLT 2710 - Histology Topics I
- CLT 2713 - Lab for Histology Topics I
- CLT 2720 - Histology Techniques
- CLT 2723 - Lab for Histology Techniques
- CLT 2730 - Special Staining in Histology
- CLT 2733 - Lab for Special Staining in Histology
- CLT 2810 - CLT Practicum
- CLT 2910 - Histology Topics II
- CLT 2990 - Histology Practicum


## Hospitality Leadership and Administration, CRT

Program Code: HLA.S.CRT•Credit Hours: 30

## Description

The Hospitality Leadership and Administration one-year certificate is designed for those desiring to become a supervisor in hospitality operations. This one year certificate will benefit those interested in hospitality supervision, the calculations of cost control, front of the house menu planning and dining, POS systems, and more. There will also be other opportunities to obtain additional certificates through the National Restaurant Associations Managed First program.

## Career Opportunities

This certificate provides career opportunities in the businesses of Hospitality Operations such all segments of food and restaurant industry, meeting \& event planning, and lodging operations.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107-Sanitation \& Safety
- HMT 1110 - Menu Planning \& Table Service Practicum
- HMT 1125 - Beverage Management
- HMT 2215 - Hospitality Cost Controls
- HMT 2225 - Hospitality \& Tourism Supervision
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3 C r} \mathbf{~ H r}(\mathbf{s})$.


## HVAC Light Commercial \& Residential Service, CRT

Program Code: LCHS.S.CRT • Credit Hours: 31-33

## Description

This program is intended for entry-level students or residential service technicians desiring careers as light commercial HVAC service technicians. This program is a hands-on troubleshooting and service program geared to the light commercial HVAC industry including convenience stores, restaurants, strip malls and any other type of small business concern. Students learn the basics of heating, cooling, distribution and control of these HVAC systems. The hands-on component uses the types of equipment installed in the field.

## Career Opportunities

Students find work as service technicians, control technicians, or performing installation work for commercial and residential contractors.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1601 - Building Electric \& Controls
- CAT 2431 - OSHA Construction Standards
- COM 2211 - Effective Public Speaking
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices
- HVA 1261 - HVAC Loads \& Distribution for Small Buildings
- HVA 1401 - HVAC Mechanical \& Electrical Troubleshooting
- MAT 1110 - Math for Technologists OR
- MAT 1200-Technical Mathematics
- MET 1131 - Personal Computer Applications for Engineering Technology
- HVA 2700 - HVACR Engineering Technology Internship OR
- EGV 1251 - Introduction to Energy Management Principles OR
- EGV 1301 - Architectural Energy Analysis OR
- EGV 1401 - Weatherization \& Building Performance Training OR
- EGV 2351 - LEED Green Associate Exam Preparation OR
- CAT 1201 - Construction Methods \& Materials OR
- CAT 1401 - Construction Cost Estimating OR
- CAT 1741 - Residential Electrical Systems


## Industrial Internet of Things Technician, CRT

## Program Code: IIOT.S.CRT • Credit Hours: 33

## Description

This one-year certificate provides the knowledge and basic skills needed to work in the automation industry as an entry-level support technician for Industrial Internet of Things (IIoT). In addition to advanced manufacturing and logistics warehousing, a growing number of IoT devices are created for consumer use, including connected automotive vehicles, home automation devices, wearable technology, connected health, and appliances with remote monitoring capabilities. Students who complete this certificate learn IIoT fundamentals, automation computer hardware, software, data management, and networking. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and necessary technical skills.

## Career Opportunities

This certificate program will provide the entry level education and training necessary to operate, program, diagnose, and repair microcontroller based IIOT devices and PLC based IIOT industrial machines. Graduates will be qualified to work for original equipment/system suppliers, consultants/third party support, as well as, equipment/system end users. All courses within certificate may be applied towards a degree in Internet of Things Cyber Technician, a high demand, high paying field.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management
- CIS 2640 - Network Security
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EET 2281 - Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"


## Industrial Robot Technician, CRT

## Program Code: IRT.S.CRT • Credit Hours: 30

## Description

This certificate provides the knowledge and skills required to meet the needs for technicians in industries that either provide robots systems for sale or use robots in their production facilities.

## Career Opportunities

This certificate program will provide the education and training necessary to operate, program, diagnose, and repair industrial robots. Graduates will be qualified to work for original equipment/ system suppliers as well as equipment/system end users.

## Program Requirements

- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231 - Troubleshooting of Automated Systems
- EGR 2250 - Electromechanical Repair
- EGR 2252 - Teach Pendant Robot Programming


## Law Enforcement, CRT

## Program Code: CJLES.S.CRT • Credit Hours: 33

## Description

This certificate prepares the learner for future training and education in the field of law enforcement. The certificate enhances law enforcement professional skills and knowledge. It may assist the student in performing well in future civil service examinations for employment or promotion. All courses in this certificate apply toward the Associate of Applied Science degree in Law Enforcement, if desired.

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice/law enforcement including those in court systems, court administration, patrol, victim services, investigation, and probation/parole.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1105-Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1125 - Policing
- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology


## Legal Nurse Consultant, CRT

## Program Code: LNC.S.CRT • Credit Hours: 33

## Description

The Legal Studies program educates students with practical assignments in a "simulated law office" environment. All student work demonstrates the professional, ethical, and technology concepts they will use in the legal field. All full-time faculty are licensed attorneys. The objective of the Legal Nurse Consultant Certificate is to prepare the registered nurse to perform legal analysis of health care issues as well as prepare them for litigation preparation on medical malpractice and personal injury cases. Building on the nurse's education and clinical experience, the program will provide the practical skills and legal knowledge necessary to function in the legal arena. Additionally, instructors will ensure that nurses who take the program understand the role of the Legal Nurse Consultant in the greater community and what is involved in working as a consultant. This certificate is intended to enhance the attractiveness of an already obtained Nursing degree by providing students with practical skills needed to work in the legal field. All students are required to complete an attorney-supervised internship for hands-on experience using their practical skills. A grade of " C " or higher is required in all courses to remain in the program. Established in 1978, the Sinclair Legal Studies Program was the first paralegal program in the area, and the first in the area to be approved by the American Bar Association. Sinclair Legal Studies graduates hold a degree from an ABA-Approved program at a fully-accredited Ohio college. Students must take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Career Opportunities

LNCs combine nursing expertise with legal knowledge to advise attorneys, and others, on matters involving medical malpractice, personal injury, product liability, workers' compensation, healthcare licensure investigations, and other healthcare related cases. Legal Nurse Consultants can find themselves in positions where they: review and analyze medical records, screen for record tampering, interview clients,
conduct research and summarize medical literature, evaluate liabilities and damages, assist with discovery and depositions, prepare exhibits and render informed opinions to attorneys on the delivery of health care and its outcomes for specific cases, assist in the selection of expert witnesses as needed, and serve as expert witnesses in cases involving nursing standards of care or related matters.

## Program Requirements

- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2401 - Legal Studies Internship
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- BIS 1221 - Specialized Computer Applications for Health

Information Management

- HIM 1204 - Medicolegal \& Ethics in Healthcare Records
- Legal Studies Elective $6 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Legal Studies Electives

- CJS 1105 - Criminal Law
- LAW 1101 - Business Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- MHT 1101 - Introduction to Mental Health Services
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2511 - Online Legal Research
- RES 1201 - Real Estate Law

Legal Studies Post Baccalaureate Certificate, CRT

## Program Code: PAR.S.CRT • Credit Hours: 34

## Description

The Legal Studies Program educates students with practical assignments in a "simulated law office" environment. All student work demonstrates the professional, ethical, and technology concepts they will use in the legal field. All full-time faculty are licensed attorneys. Student learning is supported by experienced paralegals who serve as team teachers. This certificate is intended to enhance the attractiveness of an already obtained bachelor's degree by providing students with practical skills needed to work in the legal field. All paralegal students are required to complete an attorney-supervised internship for hands-on experience using their paralegal skills. A grade of "C" or higher is required in all courses to remain in the program. Established in 1978, the Sinclair Paralegal Program was the first paralegal program in the area, and the first in the area to be approved by the American Bar Association. Sinclair paralegal graduates hold a degree from an ABAApproved program at a fully-accredited Ohio college. Students must
take at least nine credits of the equivalent of legal specialty courses through synchronous instruction.

## Career Opportunities

Sinclair led the way with the first paralegal program in the Miami Valley in 1978, and it became the first to earn approval from the American Bar Association. Nearly a thousand graduates of Sinclair's Legal Studies Program now work in large and small law firms, the business world, courts, and government agencies. Under the supervision of a lawyer, a professional paralegal may perform such interesting duties as investigating cases, interviewing clients and witnesses, preparing legal documents, and legal research. These responsibilities are carried out in a variety of legal fields, such as criminal law, probate, family law, litigation, and real estate. Employment opportunity reports for program graduates are encouraging. Completion of the Legal Studies Program does not authorize a graduate to practice law as an attorney, or to give legal advice.

## Program Prerequisite(s)

- Approval of Department AND
- Students must have obtained a bachelor's degree with a GPA of 2.0 or higher from an accredited institution to be eligible to pursue this certificate.


## Program Requirements

- PAR 1101 - Introduction to Legal Studies
- PAR 1102 - Legal Technology
- PAR 1103 - Litigation
- PAR 1201 - Legal Research \& Writing
- PAR 1202 - Advanced Legal Technology
- PAR 1203 - Advanced Litigation
- PAR 2301 - Advanced Legal Research \& Writing
- PAR 2302 - Family Law
- PAR 2303 - Probate Law
- PAR 2401 - Legal Studies Internship
- RES 1201 - Real Estate Law
- Legal Studies Elective 6 Cr. $\mathbf{H r}(\mathbf{s})$.


## Legal Studies Electives

- CJS 1105 - Criminal Law
- LAW 1102 - Consumer Law
- LAW 1103 - Domestic Violence
- LAW 1104 - Employment Law
- PAR 2507 - Legal Interviewing Skills
- PAR 2511 - Online Legal Research


## Mechanical Drafter, CRT

## Program Code: MEDRAFT.S.CRT • Credit Hours: 34-35

## Description

The Mechanical Drafter certificate familiarizes students to the basics of the industrial design process, industry terminology, general practices, and latest versions of computer-aided drafting software. All courses are part of the Mechanical Engineering Technology associate degree.

## Career Opportunities

Professionals with basic mechanical engineering and software design skills are in demand by mechanical design firms.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MAN 2110 - Introduction to Project Management OR
- MET 1151 - Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts OR
- MET 2700 - Mechanical Engineering Technology Internship OR
- PHY 1141 - College Physics I
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD
- MET 2281 - Engineering Technology Professional Practice
- MET 1301 - SolidWorks Basics
- OT36 Social and Behavioral Sciences Elective $3 \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.


## Medical Assistant, CRT

## Program Code: MAS.S.CRT • Credit Hours: 37

## Description

Medical assistants are multi-skilled professionals who assist physicians with the administrative and clinical aspects of patient care. This certificate is designed to be completed in three (3) semesters on a fulltime basis. The certificate consists of open enrollment courses (general education and division specific) and program specific courses with limited enrollment. The open enrollment courses may be taken prior to entry into the limited enrollment courses. To qualify for entry to limited enrollment courses, please see the Applicant Information packet located on the webpage. A cumulative GPA of 2.0 is required, as well as a grade of C or higher in all certificate courses. The student will be required to complete 210 hours of unpaid supervised practicum during their third semester of the certificate. Note: Healthcare Professional CPR, health certificate, immunizations, student health insurance, and background check must be completed prior to enrolling in the practicum component of the curriculum. The graduate is eligible to sit for a national exam to become a credentialed medical assistant.

## Accreditation

Sinclair Community College's Medical Assistant certificate program is accredited the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).
Commission on Accreditation of Allied Health Education Programs, 9355 113th Street N., \#7709, Seminole, FL 33775.

## Career Opportunities

Currently medical assisting is one of the fastest growing occupations in the United States with an expected increase in potential jobs by as much as $23 \%$ through 2028 (US Bureau of Labor Statistics, Sept. 4, 2019). Options for individuals seeking medical services and treatment: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMO's), multi-physician group practices and medical specialty clinics have opened new career opportunities.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes
- ALH 2201 - Survey of Drug Therapy
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1102 - Clinical Medical Assisting I
- MAS 1192 - Lab for MAS 1102
- MAS 1103 - Clinical Medical Assisting II
- MAS 1193 - Lab for MAS 1103
- MAS 1110 - Administrative Medical Assisting
- MAS 2201 - Clinical Medical Assisting III
- MAS 2291 - Lab for MAS 2201
- MAS 2210 - Medical Billing Specialist
- MAS 2220 - MAS Practicum


## Ohio Peace Officer Basic Training Academy Professional, CRT

## Program Code: BPA.S.CRT • Credit Hours: 32

## Description

This program provides the Ohio Peace Officer training required by the State of Ohio for new Ohio law enforcement officers. Additionally, this program is designed specifically for cadets who wish to pursue a career in law enforcement, and the training provided enhances one's ability to successfully receive a certificate of completion from the State of Ohio. This program is the foundation for graduates to further their educational pursuits and is limited to those persons who are officially enrolled in the Sinclair Community College basic training academy. Graduates of this program shall receive certificates of completion from the Ohio Attorney General's office indicating they have completed basic training and are certified to become commissioned law enforcement officers for Ohio agencies.

## Career Opportunities

Local and state law enforcement agencies as well as private investigation and personal protection agencies.

## Program Prerequisite(s)

## Physical fitness assessment, fingerprint check, oral interview and

 college level ready for English.
## Program Requirements

- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II
- ENG 1101 - English Composition I
- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology


## Paramedic, CRT

## Program Code: EPST.S.CRT• Credit Hours: 33-34

## Description

Paramedics are essential members of the health care team who provide time-sensitive care to patients. These individuals take the emergency department to people's homes, to highways and to other remote locations. Paramedics bring life-saving equipment and knowledge to bear in an effort to reduce patient's suffering and to save lives. Students will use lecture, laboratory and real-world exposure to emergencies to learn the skills needed to care for the sick and injured in the out-ofhospital environment. The program is offered to provide students with variability and flexibility in scheduling. For more information, contact the EMS department at 937-512-5338 for an entrance application packet.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidates state licensures/certifications.

## Program Prerequisite(s)

- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I with a grade of C or better AND
- Approval of Department AND
- Valid State of Ohio EMT Certification


## Program Requirements

- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- EMS 2100 - Applied Anatomy, Physiology \& Pathophysiology for Emergency Medical Services Provider
- EMS 2105 - Paramedic 1: Lecture
- EMS 2110 - Paramedic 1: Laboratory
- EMS 2125 - Paramedic 2: Lecture
- EMS 2130 - Paramedic 2: Laboratory
- EMS 2150 - Paramedic 3: Lecture
- EMS 2155 - Paramedic 3: Laboratory
- EMS 2160 - Paramedic 3: Clinical
- EMS 2175 - Paramedic 4: Lecture
- EMS 2180 - Paramedic 4: Field Experience
- EMS 2200 - Paramedic 5: Integration / Refresher Lecture
- EMS 2205 - Paramedic 5: Integration / Refresher Laboratory
- EMS 2135 - Paramedic 2: Clinical OR
- EMS 2136 - Paramedic 2a: Clinical AND
- EMS 2137 - Paramedic 2b: Clinical


## Polysomnography, CRT

## Program Code: PSG.S.CRT • Credit Hours: 35-36

## Description

A Polysomnographic Technologist performs overnight, daytime, or home sleep studies, polysomnograms, on people with suspected sleep disorders. They work under the general supervision of a physician or designee. The polysomnographic technologist responsibilities include, but not limited to recording and analyzing related data and report their technical findings to the physician to aid in rendering a medical decision. The foundation principles of the Polysomnography certificate are geared toward the specialties of sleep, medicine, respiratory, neurology and behavioral sciences. The program includes a non-paid, supervised practicum to provide students the "hands-on" clinical experience at an SCC affiliated healthcare facility. Requires Professional Healthcare CPR; background check; immunizations prior to END 1891 - Polysomnography Practicum.

## Accreditation

Sinclair Community College's Polysomnography Certificate is accredited by the Commission on Accreditation of Allied Health Education Program (CAAHEP: https://www.caahep.org/Home.aspx). The Committee on Accreditation for Education in Polysomnographic Technologist Education (CoA-PSG) and CAAHEP's Board of Directors recognized the program's substantial compliance with the nationally established accreditation standards. Commission on Accreditation of Allied Health Education Programs, 9355 113th St. N, \#7709 Seminole, FL 33775 Phone: 727-210-2350 Fax: 727-210-2354

## Career Opportunities

Kettering Health Network, Premier and Dayton Children's hospital have all expressed the need for RPSGT prepared individuals. Average salary per year for a Polysomnographic Technician in Ohio is $\$ 55,310$ as of October 30,2019 , but the range typically falls between $\$ 49,730$ and $\$ 61,437$. Polysomnographic Technician Salary in Ohio |
Salary.com

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- END 1421 - Intermediate Polysomnography
- END 1425 - Lab for Intermediate Polysomnography
- END 1430 - Advanced Polysomnography
- END 1435 - Lab for Advanced Polysomnography
- END 1801 - Seminar for Polysomnography Practicum
- END 1891 - Polysomnography Practicum
- END 2550 - Fundamentals of Polysomnography
- END 2585 - Lab for Polysomnography
- END 2460 - Neurophysiology of Electroencephalography/Sleep Disorders
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1450 - Introductory Statistics


## Pre-Actuarial Science, CRT

## Program Code: ACTU.S.CRT • Credit Hours: 30

## Description

Students will complete all first and second-year technical courses required for bachelor's programs in Actuarial Science. This coursework is aligned with the recommendations of the Society of Actuaries (SOA) for students preparing to take the SOA professional qualifying exams. See soa.org for more information.

## Career Opportunities

Actuaries work for insurance companies and other financial institutions that use mathematical models to quantify expected gains and losses in selling consumer financial products and in making investments. Students who complete this certificate program will be well on their way to pursuing career opportunities as actuaries, financial advisers, or statistical consultants.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting OR
- CIS 1111 - Introduction to Problem Solving \& Computer Programming OR
- MAT 2600 - Applied Statistics
- ECO 2160 - Principles of Macroeconomics
- ECO 2180 - Principles of Microeconomics
- MAT 2270 - Calculus \& Analytic Geometry I
- MAT 2280 - Calculus \& Analytic Geometry II
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2320 - Linear Algebra

Quality Control Technology, CRT

## Program Code: QCT.S.CRT • Credit Hours: 30-32

## Description

This certificate prepares students to apply basic quality tools to the testing and inspection of mechanical systems and to take the Certified Quality Technician exam from the American Society for Quality.

## Career Opportunities

This certificate is geared both to students who desire an entry-level position in the area of mechanical inspection or to skilled workers desiring upgrade training.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- COM 2211 - Effective Public Speaking
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313 - Coordinate Measurement
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt
- MAT 1470 - College Algebra OR
- MAT 1580 - Precalculus


## Recovery Service Support, CRT

## Program Code: SWS.S.CRT • Credit Hours: 35

## Description

This certificate can assist graduates in providing client services in a wide variety of fields such as psychology, rehabilitation, social work, and family support. In addition, students may assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, and dependent care. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.

## Career Opportunities

Someone who completes the Recovery Service Support certificate may be employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve a degree in the Community and Public Service AAS or an AA Social Work with additional coursework.

## Program Requirements

- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 2138 - Ethical Issues in the Helping Professions
- PSY 1100 - General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 2205 - Social Problems
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work


## Residential Real Estate Renovation and Resale, CRT

## Program Code: RERR.S.CRT • Credit Hours: 30

## Description

This program is designed for entrepreneurial individuals seeking to purchase, renovate, and resell residential properties. Students study business practices related to real estate and construction. Courses help develop hands-on skills applicable to residential renovation work, including carpentry, electrical, and HVAC work. Construction jobsite safety is emphasized. Graduates of this program possess skills necessary for residential real estate acquisition, renovation, and resale.

## Career Opportunities

Graduates have hands-on skills applicable to residential renovation work, including carpentry, electrical, and HVAC work, along with construction jobsite safety is emphasized. Graduates possess skills necessary for residential real estate acquisition, renovation, and resale.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ENT 2140 - Small Business Finance
- CAT 1201 - Construction Methods \& Materials
- CAT 1401 - Construction Cost Estimating
- CAT 2431 - OSHA Construction Standards
- CAT Construction Elective 5.5 Cr. $\mathbf{H r}(\mathbf{s})$.
- ENG 1101 - English Composition I OR
- ENG 1131 - Business Writing
- RES 1101 - Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1302 - Real Estate Investment: Analysis \& Financing
- RES 1401 - Real Estate Appraisal

Construction Electives

- CAT 1141 - Reading Architectural Drawings
- CAT 1701 - Construction Craft Skills/Concrete
- CAT 1721 - Structural Framing Systems
- CAT 1741 - Residential Electrical Systems
- CAT 1761 - Interior \& Exterior Finishes
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \&

Project Delivery

- CAT 2630 - Architectural Practice Project Deliverables \&

Contractual Obligations

- CAT 2640 - Construction Project Change Management
- CAT 2435 - Construction Credentials
- HVA 1201 - Basic HVAC Systems with Cooling
- HVA 1221 - Heating Systems
- HVA 1241 - HVAC Installation Techniques \& Practices


## Retail Manager, CRT

## Program Code: RMG.S.CRT • Credit Hours: 33

## Description

The Retail Management certificate is a business program where students learn the key skills needed for retail management success. The Retail Management certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, manufacturing and service industries. This certificate enables students to further build and develop their skills toolbox that will enable them to be successful in the workplace. Additionally, students with justice-involved backgrounds will gain the necessary tools to obtain viable employment in a growing field..

## Career Opportunities

The Retail Manager technical certificate takes the Retail Management certificate one step further by providing students with the necessary skills to start or advance their career in the retail industry. Students will gain a greater understanding of the "why principles" thus enabling them to find their niche within the broad spectrum of retail careers..

## Program Requirements

- ACC 1100 - Survey of Accounting
- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2275 - Retail Management Capstone
- MRK 2100 - Foundations of Marketing
- MRK 2220 - Small Business Marketing


## Sports Management, CRT

Program Code: SMAN.S.CRT•Credit Hours: 33

## Description

This certificate is designed to prepare students for careers in the field of sport and recreation management. Sports Management provides a solid foundation in sport related business. This certificate contains an embedded Coaching short-term certificate. Course work includes sports management, coaching, and leadership along with management, marketing, communication, business law, finance, and accounting. Students are prepared to enter a sports management profession.

## Career Opportunities

Students will have the opportunity to develop knowledge and relationships that lead to employment in one of Ohio's over 1,600 fitness centers and recreational sports centers. Students will have the foundational industry knowledge and business contacts necessary to pursue internships and careers.

## Program Requirements

- ACC 1100 - Survey of Accounting
- COM 2286 - Public Relations Principles
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAN 1114 - Introduction to Sports Management
- MAN 2144 - Negotiation Techniques
- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership
- MRK 2220 - Small Business Marketing


## Supply Chain Management, CRT

## Program Code: SCMC.S.CRT•Credit Hours: 30

## Description

Students gain a basic understanding of supply chain management processes to prepare them for a new position or to update the skills of those currently employed in a supply chain management (SCM) role.

## Career Opportunities

SCM specialists have opportunities for management positions at all levels in virtually every type of business, throughout small and medium-sized businesses, corporations, industries, nonprofit organizations and government agencies.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2225 - Small Group Communication
- ENG 1131 - Business Writing
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1157 - Management Applications of Radio Frequency

Identification Technology

- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2101 - Introduction to Supervision OR
- MAN 2140 - Human Resource Management
- MAN 2110 - Introduction to Project Management OR
- MAN 2155 - Management Information Systems
- MAT 1120 - Business Mathematics OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{C r}$. $\mathbf{H r}(\mathbf{s})$.
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

## Supply Chain Manager, CRT

## Program Code: SMC.S.CRT • Credit Hours: 34

## Description

This certificate takes the Supply Chain Technician STC one step further by preparing students with background issues in skills such as customer service and supervision by addressing the basic principles of management through an assessment of skills and an analysis of situational factors that lead to the development of creative approaches to supervision. This certificate contains foundational courses that apply towards AAS in Business Management/Supply Chain Management.

## Career Opportunities

Upon completion of this certificate, students will be prepared to work as an entry-level supervisor in the field of logistics, purchasing and warehousing.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- MAN 1106 - Introduction to Radio Frequency Identification
- MAN 1107 - Foundations of Business
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAT 1120 - Business Mathematics
- SOC 1101 - Introduction to Sociology


## Surveying, CRT

Program Code: SUR.S.CRT • Credit Hours: 33-34

Certificate develops the skills needed to become employed as technicians for surveying or civil engineering firms.

## Career Opportunities

Surveying technicians assist professional surveyors in surveying for construction and land transfer activities.

## Program Requirements

- CAT 1300 - Introduction to CAD for Applications in Civil Engineering Technology
- CAT 1501 - Fundamentals of Surveying \& Mapping
- CAT 2431 - OSHA Construction Standards
- CAT 2501 - GPS \& GIS for Engineering Technology Professionals
- CAT 2531 - Advanced Surveying \& Mapping
- CAT 2561 - Route Surveying with Construction Applications
- CAT 2571 - NSPS Certified Survey Technician Preparation
- CAT 2581 - Legal Principles for Surveyors
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1200-Technical Mathematics OR
- MAT 1470 - College Algebra AND
- MAT 1570 - Analytic Geometry \& Trigonometry OR
- MAT 1580 - Precalculus
- OT36 Social and Behavioral Sciences Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Tool Maker, CRT

## Program Code: CAMTM.S.CRT • Credit Hours: 30

## Description

This certificate in tool making provides the student with the technical and hands-on experience required by employers in both an entry and apprenticeship level. This program will provide experience in safety, advanced manual machining, drafting and design, Computer Numerical Control (CNC) and conversational programming, welding and metal joining, measurement tools and techniques, and other instruction and experience needed within this trade. This program is available to anyone and works well with the apprenticeship model or those that need to work and learn at the same time.

## Career Opportunities

The Tool Maker certificate gives the student the technical skills and abilities needed by someone entering this career field either independently or as an apprentice. This program is designed to compliment a full-time apprenticeship or the student that is required to work full-time while seeking a career in the precision machining industry.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations


## Description

- CAM 1116 - Fundamentals of Computer Numerical Control

Operations

- CAM 1180 - Welding \& Metal Joining I
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2114 - Jig \& Fixture Design
- CAM 2145 - Shop Floor Programming
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## UAS Entrepreneurship, CRT

## Program Code: UASENT.S.CRT • Credit Hours: 33

## Description

This certificate integrates technical Unmanned Aerial Systems (UAS) curriculum with business and entrepreneurship courses. There is a need in the Unmanned Aerial Systems (UAS) industry for entrepreneurial technicians who have the knowledge and skills to apply advanced technology and intellectual property (IP) in a variety of high-tech applications. Related to UAS, this includes aircraft, sensors, avionics, software, data analytics, and other advanced technologies.

## Career Opportunities

There are many opportunities in the Unmanned Aerial Systems (UAS) industry, both for those seeking to develop their own business or those hired as employees of an existing firm. In either case, the application of entrepreneurial knowledge and best practices, complimented by technical knowledge, is required in a competitive UAS industry that is driven by rapid advances in technology and applications. Students completing this certificate will be prepared for success as they seek to establish and grow their own ventures or support an established organization.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- ENG 1101 - English Composition I
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MAT 1470 - College Algebra
- MET 1131 - Personal Computer Applications for Engineering Technology
- MRK 2220 - Small Business Marketing


## Unmanned Aerial Systems, CRT

## Program Code: UAS.S.CRT • Credit Hours: 32-34

The Unmanned Aerial Systems One Year Technical Certificate prepares students with the foundational knowledge and skills related to Unmanned Aerial System technology, tools, and applications needed to support industry as a pilot/operator, visual observer, ancillary ground crew member, or data analyst while following applicable laws, regulations, and standards governing operations in the National Airspace System. Students may choose one of the four specialization options including Precision Agriculture, First Responders, Geographic Information Systems, or Aerial Sensing Data Analysis.

## Career Opportunities

The rapid growth of the Unmanned Aerial Systems industry has created many new and expanded career opportunities for those pursuing a career in civil and commercial applications of the technology. Major opportunities exist in the areas of Precision Agriculture, First Responders, Geographic Information Systems, and Aerial Sensing Data Analysis. There is current and expanding industry demand for personnel with capabilities in Unmanned Aerial System operations, maintenance and data analysis.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1103 - Remote Pilot Ground School
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1110 - Private Pilot Ground School
- AVT 2150 - Crew Resource Management for UAS
- AVT 2151 - UAS Operations I
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- ENG 1101 - English Composition I
- MAT 1470 - College Algebra
- MET 1131 - Personal Computer Applications for Engineering

Technology

- AVT 1120 - Electro-Optical \& Infrared Data Analysis AND
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis AND
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging

Data Analysis AND

- AVT 1123 - Acoustic \& CBRNE Data Analysis AND
- GEO 1107 - Introduction to Geographic Information Systems (GIS)

OR

- AVT 1108 - UAS First Responder Applications AND
- CJS 1101 - Introduction to Criminal Justice Science AND
- CJS 1155 - Homeland Security Issues \& Administration AND
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory OR
- AVT 1114 - Geospatial Information for UAS AND
- CAT 1501 - Fundamentals of Surveying \& Mapping AND

GEO 1107 - Introduction to Geographic Information Systems (GIS) OR

- AVT 1112 - UAS Precision Agriculture AND
- AGR 1160 - Introduction to Agriculture Science AND
- AGR 1200 - Agricultural Economics AND
- AGR 1300 - Agronomy


## Description

## Program Code: UCA.S.CRT • Credit Hours: 31

## Description

The Urban and Community Agriculture Certificate will equip students with basic knowledge of plant science that is used for the growth, development, and utilization of cultivated plants. This knowledge will allow the students to propagate plants, implement sustainable landscape design, understand the science of soil, and will ultimately enable the student to operate and manage a greenhouse.

## Career Opportunities

This certificate will provide the skills for growing sustainable food in urban areas and communities.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1202 - Science of Soil
- AGR 1203 - Trees \& Shrubs
- AGR 1204 - Plant Propagation
- AGR 1205 - Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design
- AGR 1209 - Greenhouse Management Capstone
- ENT 2140 - Small Business Finance


## Welding, Metal Joining, \& Fabrication, CRT

Program Code: CAMWMF.S.CRT • Credit Hours: 30

## Description

Based on an Industry need this certificate meets specific needs in precision Welding, Metal Joining and Fabrication techniques that will align and work in conjunction with student and industry needs. This certificate will help students already working in industry and allow others to build skills that will help with entry level employment. This certificate program contains the Welding and Metal Joining (CAMWM.S.STC) embedded certificate which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate, please notify Registration and Student Records at studentrecords@ sinclair.edu.

## Career Opportunities

The student successfully completing this certificate will have the necessary skills and knowledge to design, build, weld and repair in a wide variety of situations which will be an addition to current skills or allow entry into many manufacturing careers which desire non-certified welders. These careers can range from entry level to higher level positions in Machine repair, Die and Mold repair, Metal Fabrication, Tool and Die shops, general repair shops and general manufacturing.

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1180 - Welding \& Metal Joining I
- CAM 1181 - Welding \& Metal Joining II
- CAM 1182 - Welding \& Metal Joining III
- CAM 1184 - Weldability of Ferrous \& Nonferrous Metals
- CAM 2114 - Jig \& Fixture Design
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Short Term Certificate

## Additive Design Specialist, STC

## Program Code: ADS.S.STC • Credit Hours: 10

## Description

This certificate will introduce students to additive design and manufacturing using 3D modeling software and 3D printers.

## Career Opportunities

This certificate provides students with the basic skills needed to work as a technician in rapid prototyping using 3D design, 3D printing, and post processing

Program Requirements

- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 1401 - Additive Design \& Printing
- MET 1431 - Additive Manufacturing Post Process


## Aerial Sensing Data Analytics, STC

## Program Code: UASDTA.S.STC • Credit Hours: 18

## Description

The Aerial Sensing Data Analytics Short-Term Technical Certificate provides an introduction to unmanned aerial systems (UAS) technologies, applications, and regulatory and legal considerations. The program prepares students for entry level positions as analysts of aerially collected electro-optical (EO) and infrared (IR), multi-and hyperspectral (MSI/HSI), synthetic aperture radar (SAR), light detection and ranging (LiDAR), acoustic, and chemical, biological, radiological, nuclear, and explosives (CBRNE) data.

## Career Opportunities

The Aerial Sensing Data Analytics Short-Term Technical Certificate will produce graduates who will serve the immediate Dayton area, broader region, and nationally. Graduates of certificate program will contribute to filling the current and growing need for data analysts that
can process, interpret, present, and make decisions based on a variety of unmanned and manned aircraft collected data types. Positions exist in start-ups and existing established firms, with growth expected for the foreseeable future. The Association for Unmanned Vehicle Systems International estimates that there will be 100,000 new jobs related to unmanned aerial systems created by 2025.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1120 - Electro-Optical \& Infrared Data Analysis
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- AVT 1122 - Synthetic Aperture Radar \& Light Detection \& Ranging Data Analysis
- AVT 1123 - Acoustic \& CBRNE Data Analysis
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)


## Agribusiness, STC

## Program Code: AGR.S.STC • Credit Hours: 16

## Description

The agribusiness short-term certificate will introduce students to the agriculture industry and prepare them for entry into the agriculture workforce. Graduates of this certificate will be skilled in the foundations of business, agriculture, agricultural economics and agronomy.

## Career Opportunities

Potential employment in agriculture includes entry-level positions in the following: agricultural technician, farm operations, agronomy, agricultural finance and accounting, retail sales and licensed pest control.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1200 - Agricultural Economics
- AGR 1300 - Agronomy
- BIS 1120 - Introduction to Software Applications
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business


## Aircraft Dispatcher, STC

## Program Code: ADSP.S.STC • Credit Hours: 24

## Description

The Aircraft Dispatcher certificate provides students with the theory and practical knowledge necessary to enter a career in the aviation industry as an aircraft dispatcher. Completion of this certificate will make the student eligible to take the knowledge and practical tests leading to the Federal Aviation Administration (FAA) Aircraft
Dispatcher (ADX) certification. Students study aircraft performance, meteorology, crew resource management, air traffic control, advanced navigation, airline operations and FAA knowledge. Age Restrictions: To be eligible for an ADX certificate, a person must be at least 23 years of age. Individuals who are at least 21 years of age may take the ADX knowledge and practical tests. Individuals who pass the practical test prior to reaching 23 years of age are not entitled to the certificate itself but will be issued a Letter of Aeronautical Competency. Upon reaching 23 years of age, the FAA will issue the ADX certificate.

## Career Opportunities

Career opportunities are available in airline and corporate aviation.

## Program Requirements

- AVT 1105 - Orientation to Aviation
- AVT 1110 - Private Pilot Ground School
- AVT 1119 - Aviation Meteorology
- AVT 1141 - Principles of Aviation Leadership
- AVT 2146 - Introduction to Airline Operations
- AVT 2157 - Aircraft Performance I
- AVT 2158 - Aircraft Performance II
- AVT 2159 - Canadair Regional Jet (CRJ) Aircraft Systems
- AVT 2166 - Practical Dispatch Applications
- AVT 2167 - Instrument Flight Rules (IFR) Navigation \& Planning
- AVT 2168 - Dispatcher Oral Preparation
- MET 1131 - Personal Computer Applications for Engineering Technology


## Airline Flight Attendant, STC

## Program Code: AFAS.S.STC • Credit Hours: 12

## Description

The Airline Flight Attendant certificate provides students with the basic theory of airline travel with an understanding of the policies, procedures and means of compliance with Federal Aviation Regulations. Students explore the business of air commerce and develop the skills of a travel professional. Includes exploration of communications, safety and security, air travel, customer service, airline operations and crew resource management. This program develops the knowledge and skills required to serve as a flight attendant and to enter a career in the aviation industry.

## Career Opportunities

Career opportunities are available in airline and corporate aviation.

## Program Requirements

- AVT 1102- Orientation to Inflight Services
- AVT 1148 - Aircrew Emergency Management
- AVT 1151 - Crew Survival \& Rescue Techniques
- AVT 2146 - Introduction to Airline Operations


## Appalachian Studies, STC

## Program Code: HUM.S.STC • Credit Hours: 16

## Description

The short-term technical certificate is designed for students who are planning on using Appalachian Studies to enhance their careers in a variety of disciplines such as: Sociology, Social Work, Education, Government, Health Care, and Public Safety (i.e., fire and police work). The student who pursues this short-term technical certificate will use the certificate to supplement their professional development.

## Career Opportunities

This certificate enhances careers in Sociology, Social Work, Education, Government, Health Care, Public Safety and related fields.

## Program Requirements

- HUM 1141 - Appalachian History \& Culture
- HUM 1142 - Native American History
- SOC 1101 - Introduction to Sociology OR
- SOC 1145 - Introduction to Cultural Anthropology
- REL 2255 - People \& Religion OR
- SOC 1108 - Appalachian Families OR
- SOC 2210 - Cultural Humility for Working with Youth
- GEO 1206 - Appalachian Environment OR
- HIS 1101 - United States History I OR
- HIS 1102 - United States History II OR
- HIS 2215 - Survey of African History OR
- HIS 2218 - History of Ohio
- SCC 1101 - First Year Experience


## Artificial Intelligence (AI)/Autonomous Systems, STC

Program Code: UASAI.S.STC • Credit Hours: 23

## Description

This short-term certificate in Artificial Intelligence (AI)/ Autonomous Systems, which is fully embedded within the Bachelor of Applied Science degree in Unmanned Aerial Systems, gives the student the indepth knowledge they need to transform large amounts of data into actionable decisions. The program and its curriculum focus on how complex inputs - such as vision, sensor data, robotics, and huge databases - can be used to make decisions or enhance human capabilities. The curriculum includes coursework in aviation technology, computer science, math and statistics, robotics, computational modeling, machine learning and symbolic computation.

The program includes courses from the Aviation Technology,
Computer Information Systems (CIS), and Mathematics Departments.

## Career Opportunities

AI / ML Scientist and Engineers rank among the top emerging jobs, their roles have grown over $650 \%$ since 2012 . Job growth in the next decade is expected to outstrip growth during the previous decade, creating 11.5 M jobs by 2026, according to the U.S. Bureau of Labor Statistics. Based on the assets, capabilities, and resources focused on UAS / AVT technologies, the Dayton region and the State of Ohio are in a unique position to further secure their status as a destination of choice for this expertise. The region continues to transition from automotive/heavy manufacturing to high growth industries integral to UAS / AVT including sensors, robotics, advanced data analytics and management, and advanced materials and manufacturing. The Dayton Development Coalition and the State of Ohio are dedicating significant resources to support growth related to UAS / AVT. Building upon the leadership role that Wright-Patterson Air Force Base is taking in UAS, coupled with Ohio's aviation heritage and strong aerospace industry, Sinclair's UAS program will continue to benefit the students, institution, and the region. And will further strengthen the regional capabilities related to UAS / AVT and advance their commercial integration at the local, state, and national levels.

## Program Requirements

- AVT 2240 - Human Factors in Aviation
- AVT 3300 - Artificial Intelligence (AI) in Aviation
- AVT 3400 - Human Sensation \& Perception in Aviation
- AVT 4215 - Autonomous Systems in Aviation
- AVT 4220 - Human Autonomy Teaming in Aviation
- CIS 2266 - Python for Data Analytics
- MAT 2215 - Mathematics for Machine Learning \& Artificial Intelligence


## Automotive High Performance, STC

## Program Code: AHPC.S.STC • Credit Hours: 25

## Description

This short-term certificate provides in-depth, hands-on experiences in various areas of high-performance engines, an ideal choice to supplement a degree-seeking student wishing to specialize in the engine and fuel induction areas. The program is also designed to prepare students for the ASE (Automotive Service Excellence) engine machinist series. Courses are dedicated to specific areas of engine development: engine blocks, cylinder head and valve train, assembly and dynamometer testing. Fuel systems for performance engines are covered as well.

## Career Opportunities

Career opportunities are available in positions for automotive service technicians in dealerships, independent shops, motor sports businesses and automotive machine shops. In addition, graduates are also employed as service managers, parts managers, sales representatives or motor sports specialist.

Program Prerequisite(s)

- AUT 1108 - Automotive Engine Systems OR
- AUT 1115 - Automotive Engine Performance I


## Program Requirements

- AUT 1108 - Automotive Engine Systems
- AUT 1115 - Automotive Engine Performance I
- AUT 2221 - High Performance Engine Blocks \& Heads
- AUT 2222 - High Performance Engine Assembly \& Dyno Testing
- AUT 2224 - High Performance Fuel Induction Systems


## Automotive Maintenance \& Light Repair, STC

## Program Code: MLR.S.STC • Credit Hours: 14

## Description

This certificate provides the skills and training needed to earn an entrylevel position at an automotive maintenance repair facility. Courses included in the certificate will prepare students to pass the Automotive Service Excellence Maintenance and Light Repair Certification (ASE G1) test.

## Career Opportunities

Career opportunities are available in positions for automotive maintenance technicians in dealerships, independent shops and maintenance repair facilities. In addition, graduates are also employed as service managers, shop foremen, parts managers, sales representatives or automotive instructors.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1114 - Automotive Electrical/Electronic Systems I
- AUT 1116 - Automotive Steering \& Suspension Systems
- AUT 1146 - Automotive Heating Ventilation \& Air Conditioning Systems
- AUT 1165 - Automotive Brake Systems


## Automotive Service Consultant and Advising, STC

Program Code: AUTS.S.STC • Credit Hours: 4

## Description

The automotive service consultant short term certificate prepares for the C1 ASE Automobile Service Consultant Certificate test and the role as a service consultant/advisor in automotive repair facility.

## Career Opportunities

Students can obtain gainful employment as service consultants/ advisors at automotive repair facilities. Students are encouraged to take
their C1 ASE exam Automobile Service Consultant Certification test to help secure employment.

## Program Requirements

- AUT 1102 - Introduction to Automotive Service
- AUT 1111 - Automotive Service Consulting \& Advising


## Bakery Specialist, STC

## Program Code: BPSE.S.STC • Credit Hours: 17

## Description

The Bakery Specialist short-term certificate program is designed to provide students the knowledge and skills necessary to be employed in a commercial retail bakery after completion.

## Career Opportunities

A student completing this short-term certificate will be eligible for a position as a baker in retail grocery baking departments or as a baker in an independent bakery.

Program Prerequisite(s)

- HMT 1107 - Sanitation \& Safety

Program Requirements

- HMT 1102 - Kitchen Chemistry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 1128 - Baking II \& Barista Basics
- HMT 2110 - Pastry \& Confectionary
- HMT 2126 - Cake Production \& Cake Decoration
- HMT 2128 - Cake Decoration


## Basic Baking and Fundamentals, STC

Program Code: BBF.S.STC • Credit Hours: 13

## Description

This short-term certificate focuses on the science of baking as well as basic techniques using ingredients such as flour, leaveners, salt, sugar, dairy, fats, extracts, spices and other add-ins such as vanilla extract, chocolate chips, etc.

## Career Opportunities

This certificate provides career opportunities in businesses of bakeries and tortilla manufacturing, food and beverage stores, restaurants and other eating places, pretzel shops, and the opportunity to be selfemployed.

- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1126 - Baking I, II, \& Barista Basics
- HMT 1128 - Baking II \& Barista Basics
- HMT 2201 - Food Service Equipment, Design \& Maintenance


## Basic Drawing, STC

## Program Code: DRWG.S.STC • Credit Hours: 9

## Description

This short-term certificate provides basic proficiency in freehand drawing. The student will draw with a variety of materials including charcoal, pastel and ink. The student will be able to render threedimensional items on a two-dimensional surface and will be able to demonstrate proficiency in value, contour and perspective. This certificate will provide the student with a broad range of styles and historic sources for his or her work, whether the individual is a graphic designer or freelance illustrator.

## Career Opportunities

The Art department strives to provide students with high quality education experiences in the visual arts, and the short-term certificate in Basic Drawing prepares students to enhance their freehand drawing skills - especially professionals working in the fields of graphic design or freelance illustration.

## Program Requirements

- ART 1111 - Drawing I
- ART 1112 - Drawing II
- ART 1121 - Beginning Painting I OR
- ART 2111 - Intermediate Drawing I OR
- ART 2216 - Life Drawing \& Anatomy I OR
- ART 2221 - Intermediate Painting-Observation \& Concept OR
- ART 2222 - Intermediate Painting - The Figure


## Basic Preparation of Food, STC

## Program Code: BFP.S.STC Credit Hours: 9

## Description

This short-term certificate focuses on sanitation, knife skills, sauce making, food grade commercial equipment, and butchery.

## Career Opportunities

This certificate provides career opportunities in the businesses of Food Trucks, Restaurants, College \& University Food outlets, as well as Hospital Food outlets, Grocery Stores, etc., and the opportunity to be self-employed.

- HMT 1101 - Basic Culinary Skills
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 2201 - Food Service Equipment, Design \& Maintenance
- HMT 2207 - Butchery \& Fish Management


## Basic Quality, STC

## Program Code: IBQ.S.STC • Credit Hours: 18-20

## Description

This certificate provides the student with the basics of drafting and blueprint reading while developing AutoCAD techniques, and learning software applications that will be used throughout a career in quality. Covering various measurement techniques involving shop measuring instruments; correct use and care. Students learn the application of Geometric Dimensioning and Tolerancing (GD\&T) principles along with the Coordinate Measuring Machine (CMM) which also gives the student an Industry Recognized credential from Hexagon Intelligence for PC-DMIS for CMM 111 software. Basic Quality will prepare the student and give them the skills to improve customer relations, measure products, and processes, analyze current process control and capability and define and audit the quality management system. This certificate meets the needs of a student looking to enter many areas where the needs of basic quality knowledge are required to obtain an entry-level position.

## Career Opportunities

This certificate is a great opportunity for entry level employment in the quality control field or as an addition to other fields that will boost career opportunities by the addition of quality techniques. In addition the student will earn an Industry Recognized Certificate in OPT 1113 Coordinate Measurement from Hexagon Manufacturing Intelligence for "PC-DMIS for CMM 111".

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

- ISE 1120 - Problem Solving \& Continuous Improvement
- ISE 1300 - Fundamentals of Dimensional Metrology
- ISE 1313 - Coordinate Measurement
- MAT 1470 - College Algebra OR
- MAT 1580 - Precalculus


## Black Studies, STC

## Program Code: AFRE.S.STC•Credit Hours: 15

## Description

Designed for students who are planning on using Black Studies to enhance their careers in Social Work, Public Education, Urban Planning, etc. The student who pursues this Short-term Technical

Certificate would plan to use this to supplement their professional development or to strengthen a major for which Black Studies is a strong base.

## Career Opportunities

This certificate enhances careers in Social Work, Public Education, Urban Planning and related fields.

Program Requirements

- AFR 1100 - African-American Studies
- HIS 1105 - African-American History
- HIS 2215 - Survey of African History
- LIT 2234 - Literature of Africa, Asia, \& Latin America OR
- LIT 2236 - African-American Literature
- PSY 1160 - Black Psychology


## Business Operations Systems Support, STC

Program Code: BOSS.S.STC • Credit Hours: 19

## Description

Students completing this certificate will have the written and oral communication skills, as well as the computer skills, needed to effectively support computer operations for small, medium or large companies. These skills apply equally well to an entry-level help desk support position. Technical course work emphasizes operating systems and troubleshooting skills.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as help desk support, PC network technicians, IT technicians, Enterprise network technicians and Network Administrators.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- COM 2225 - Small Group Communication
- CIS 2731 - A+ Hardware \& Software
- ENG 1101 - English Composition I
- CIS 1510 - Windows Client Operating System OR
- CIS 2550 - Linux Operating System


## Call Center/Customer Service, STC

## Program Code: CC.S.STC • Credit Hours: 17-19

## Description

This certificate is designed for those interested in working in a customer service center, help desk, call center, or medical scheduling environment. All students will learn customer service skills and telephone techniques, as well as software applications and keyboarding.

Students then choose an area of focus to strengthen industry-specific knowledge in general call center, IT help desk, health care, or medical office.

## Career Opportunities

Since 2008, Sinclair has actively participated in the Dayton region's Contact Center Alliance (CCA), a group of over 50 area employers with call centers ranging from 5 to 2,000 employees. This alliance forecasts double digit growth over the next three years.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1400 - Customer Service
- COM 2206 - Interpersonal Communication
- HIM 1101 - Medical Terminology AND
- BIS 2180 - Medical Office Simulation OR
- ALH 1102 - Basic Healthcare Practices \& Medical Scribe AND
- HIM 1101 - Medical Terminology AND
- MAS 1110 - Administrative Medical Assisting OR
- CIS 1107 - Introduction to Operating Systems AND
- CIS 1130 - Network Fundamentals OR
- MAN 1107 - Foundations of Business OR
- MAN 2150 - Management \& Organizational Behavior AND
- BIS 1230 - Spreadsheet Software OR
- BIS 1260 - Database Software


## Captioning, STC

## Program Code: CPC.S.STC • Credit Hours: 23

## Description

The Captioning Certificate is designed to prepare students for a position as a captionist in the workforce. The skills obtained will train students to provide accessible communication services to individuals with hearing loss or communication barriers. A field experience is required.

## Career Opportunities

Positions available to graduates include independent contractor and/ or staff positions.

## Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1102 - Interpreting Theory \& Best Practices
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 2401 - Captioning
- ASL 2402 - Field Placement
- ENG 1101 - English Composition I
- ENG 1201 - English Composition II


## CDA Preparation Certificate, STC

## Program Code: CDA.S.STC • Credit Hours: 9

## Description

This certificate includes three ECE courses which serve as the preparation courses for the completion of the CDA (Childhood Development Associate) certificate. These three courses provide the required content knowledge and development of the CDA portfolio. Successful completion of these courses and passage of required on-site observation will enable students to obtain the CDA certificate through the Council of Professional Recognition (CDA Council). A grade of C or better is required in all courses.

## Career Opportunities

The CDA certificate is the entry level credential required for childcare professionals. As of July 2020 the state of Ohio will require a minimum of a CDA certificate. Given the current severe shortage of qualified workers in childcare and preschool settings, the job market is very favorable.

## Program Requirements

- ECE 1400 - Introduction to Early Childhood Education CDA

Preparation

- ECE 1401 - Introductory Child Development CDA Preparation
- ECE 1402 - Healthy \& Safe Environments CDA Preparation


## Certified Production Technician, STC

## Program Code: CPT.S.STC • Credit Hours: 8

## Description

This certificate covers a wide array of skills and knowledge required in manufacturing such as safety, processes and production, measurement and quality practices, and maintenance awareness. Each of the four areas allows the student to earn a certificate for that area which leads to the Manufacturing Skill Standards Council Certified Production Technician certificate. This certificate is an Industry Recognized Certificate and is approved by the Ohio Department of Higher Education. Upon completion students will be eligible for entry-level manufacturing positions where they can demonstrate these skills and knowledge in a manufacturing setting.

## Career Opportunities

Employers are actively seeking the Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) credential holders as people that have already shown an aptitude for manufacturing along with a desire to obtain entry level jobs. This 8 credit hour certificate may be one of the best investments in education leading to gainful employment available today.

## Program Requirements

- ISE 1201 - Introduction to Manufacturing Safety
- ISE 1202 - Quality Practices \& Measurement for Manufacturing
- ISE 1203 - Manufacturing Processes \& Production
- ISE 1204 - Maintenance Awareness for Manufacturing


## Chemical Dependency Counseling, STC

## Program Code: CDC.S.STC • Credit Hours: 12

## Description

This series of courses is designed to meet the 180 clock hours of chemical dependency specific education required by the Ohio Chemical Dependency Professionals Board to apply for licensure. It is for individuals who have previously earned or are in the process of earning at least an Associate degree in behavioral science.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 22 percent from 2018 to 2028, much faster than the average for all occupations.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary
- MHT 1236 - Assessment \& Diagnosis of Substance Use Disorders
- MHT 2137 - Treatment Techniques in Substance Use Disorders
- MHT 2235 - Family Dynamics of Addiction


## Chemical Dependency Counselor Assistant (CDCA) Preliminary, STC

## Program Code: CDCA.S.STC • Credit Hours: 3

## Description

This one course certificate meets the educational requirements for the CDCA: Chemical Dependency Counselor Assistant Preliminary. Within this course, the following topics will be discussed: theories and fundamentals of addictive illness and physical/mental effects of psychoactive drugs; dynamics of substance related and addictive disorders on persons, families and society; knowledge of disease concept, stigmas, identification, assessment, trends in treatment and relapse process. Students will also develop insights, challenge biases and identify personal and professional issues and will learn elements of professional/ethical behaviors.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 22 percent from 2018 to 2028, much faster than the average for all occupations.

Program Requirements

- MHT 1130 - Fundamentals of Addiction Counseling CDCA Preliminary

Chemical Dependency Counselor Assistant (CDCA) Renewable, STC

## Program Code: CDCAII.S.STC • Credit Hours: 2

## Description

This one course certificate meets the educational requirements for the CDCA Renewable credential with the Ohio Chemical Dependency Professionals Board. Content includes: addiction and treatment knowledge, individual and group counseling, evaluation, service coordination, documentation and professionalism.

## Career Opportunities

According to the Department of Labor, employment of social and human service assistants is projected to grow 13 percent from 2018 to 2028, much faster than the average for all occupations.

## Program Requirements

- MHT 2130 - Fundamentals of Addiction Counseling CDCA Renewable


## Clinical Lab Assistant, STC

Program Code: SP.S.STC • Credit Hours: 13-14

## Description

The Clinical Lab Assistant certificate prepares students for entry-level employment in the clinical laboratory setting performing specimen collection, quality assurance and other techniques fundamental to specimen processing. The program is designed to develop knowledge and understanding of medical terminology, lab rules and regulations, and universal precautions for a clinical laboratory.

Note: For students under age 18 there may be restrictions on participating in certain Health Science programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Employment opportunities exist for certificate completers in hospital laboratories, research laboratories, pharmaceutical companies and biotechnology companies.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1113 - Clinical Phlebotomy
- ALH 1114 - Clinical Phlebotomy Practice
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- CLT 1200 - Introduction to Clinical Laboratory
- CLT 1203 - Lab for Introduction to Clinical Laboratory
- HIM 1101 - Medical Terminology


## Clinical Phlebotomy, STC

## Program Code: CPST.S.STC • Credit Hours: 6

## Description

This certificate is intended to provide entry-level competency to students seeking employment in the area of phlebotomy in health care settings. This certificate is also intended to provide expanded competencies and proficiencies to practicing health care professionals and students enrolled in health science programs. The students will be required to complete 105 hours of unpaid practicum during ALH 1114 Clinical Phlebotomy Practice. Students who complete this course will receive a certificate of completion.

Note: For students under age 18 there may be restrictions on participating in certain Health Science programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Completers will be able to obtain positions as phlebotomists in hospital laboratories, outpatient clinics and private medical laboratories.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1113 - Clinical Phlebotomy
- ALH 1114 - Clinical Phlebotomy Practice


## Coaching, STC

## Program Code: COA.S.STC • Credit Hours: 6

## Description

The short-term certificate in Coaching is designed to provide the foundational knowledge that is essential for coaching any sport. Coaches help athletes master new skills, enjoy competing with others and develop self-esteem. The certificate includes topics in coaching and leadership, sportsmanship, coaching diverse athletes, behavior management, sport first aid, drugs in sport, and the games approach to coaching.

## Career Opportunities

Students with a Coaching certificate will find career opportunities in the school and community setting including youth organizations, recreation centers, YMCAs and city parks and recreation organizations.

## Program Requirements

- MAN 2414 - Foundations of Coaching
- MAN 2415 - Foundations of Leadership


## Computed Tomography, STC

## Program Code: CT.S.STC • Credit Hours: 5

## Description

This short-term certificate in Computed Tomography (CT) is designed to provide radiographers certified by the American Registry of Radiologic Technologists (ARRT) with didactic and clinical education in computed tomography. Didactic courses focus on CT principles while clinical courses provide students with real-life experience and development of hands-on skills needed to pursue employment in computed tomography.

## Career Opportunities

Completion of this short-term certificate program can lead to employment in comprehensive hospitals, suburban or rural outpatient centers, surgery centers, etc. as a Computed Tomography Technologist.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- RAT 2640 - Computed Tomography Practicum
- RAT 2640 - Computed Tomography Practicum
- RAT 2641 - Principles of Computed Tomography


## Computer Aided Manufacturing Basic Machining Skills, STC

## Program Code: CAMBMS.S.STC • Credit Hours: 12

## Description

This short term certificate (STC) is designed to enhance the machining skills of students who have taken machining courses in high school or to allow individuals with little or no experience in machining to quickly obtain a certificate which may in turn qualify them for an entry level position in a machining company. Course work is focused on introductory levels of manual machining and basic operation of CNC machines. This STC is the first half of the Computer Numerical Control Technology short term certificate and will provide students with a milestone of completion and the ability to continue their education up to and including a two year Associate of Applied Science degree in CNC operations.

## Career Opportunities

Students who complete this certificate will become eligible for employment at an introductory level in the high tech field of
machining. All courses contained within this certificate may be applied towards a degree in CNC operation; a high demand, high paying field.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists


## Computer Aided Manufacturing Precision Machining, STC

## Program Code: CAMPM.S.STC • Credit Hours: 18

## Description

This certificate is designed to provide basic precision machining skills to workers entering the field of manual machining. It is the first half of the Advanced Precision Machining Certificate and is provided for students who are wishing to enter the workforce with the minimum skill level required to become an effective machinist. All courses in this short-term certificate will lead to an AAS degree in Computer Aided Manufacturing Precision Machining. Course work focuses on basic machining skills necessary to operate manual lathes, mills, and grinders.

## Career Opportunities

Prepares individuals for entry level positions in precision machining (manual lathes, mills, grinders).

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1110 - Advanced Machine Operations
- CAM 1111 - Advanced Machine Operations II
- ISE 1300 - Fundamentals of Dimensional Metrology
- MAT 1110 - Math for Technologists

Computer Numerical Control Technology, STC

## Program Code: CNC.S.STC • Credit Hours: 24

## Description

The Computer Numerical Control (CNC) Technology short-term certificate program is designed for individuals who are looking to upgrade their current manufacturing skills along with students who are interested in pursuing entry-level careers in the area of CNC machining. Coursework is focused primarily in the area of CNC lathe and mill operation, setup and programming. The courses included in this short-term certificate apply directly to the associate degree in Computer Aided Manufacturing, CNC Technology option.

## Career Opportunities

Prepares individuals for basic entry level jobs in CNC manufacturing.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1116 - Fundamentals of Computer Numerical Control Operations
- CAM 1214 - Computer Numerical Control Mill Programming
- CAM 2145 - Shop Floor Programming
- CAM 2204 - Computer Numerical Control Lathe Programming
- MAT 1110 - Math for Technologists
- MET 1131 - Personal Computer Applications for Engineering Technology


## Construction Administration, STC

## Program Code: CADM.S.STC • Credit Hours: 19

## Description

This program is designed for experienced construction industry personnel to improve their construction administration skills. Students will receive training to help them understand construction from an administrative perspective, including an understanding of various project delivery methods, contractual obligations and responsibilities, the financial aspects of construction, change management, and the skills necessary to deal with the diverse population of the industry. Upon completing this program, personnel will be qualified to move into construction administration positions in the industry.

## Career Opportunities

Upon completing this program, craftspeople will be qualified to move into construction administration positions within the construction industry.

## Program Requirements

- CAT 1201 - Construction Methods \& Materials
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2610 - Stakeholders \& Participants for Design \& Construction Projects
- CAT 2620 - Construction Documents, Legal Requirements, \& Project Delivery
- CAT 2630 - Architectural Practice Project Deliverables \& Contractual Obligations
- CAT 2640 - Construction Project Change Management


## Construction Supervisor, STC

## Program Code: CNTS.S.STC • Credit Hours: 25

## Description

This program is designed for experienced craftspeople of the construction industry to improve their supervisory and leadership skills. Students will receive training to help them understand the building construction industry from a management perspective, including an understanding of building materials and components, the financial aspects of building construction and the management skills necessary to deal with the diverse population of the industry. Heavy emphasis will be placed on safety. Upon completing this program, craftspeople will be qualified to move into management positions in the construction industry.

## Career Opportunities

Upon completing this program, craftspeople will be qualified to move into management positions within the construction industry.

## Program Requirements

- CAT 1111 - Mechanical Systems Print Reading
- CAT 1141 - Reading Architectural Drawings
- CAT 1161 - Introduction to the Built Environment
- CAT 1201 - Construction Methods \& Materials
- CAT 1211 - Construction Materials Testing
- CAT 1401 - Construction Cost Estimating
- CAT 2401 - Construction Project Management
- CAT 2411 - Architectural Practice, Codes \& Laws
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials
- COM 2206 - Interpersonal Communication


## Construction Technician, STC

## Program Code: CNTC.S.STC • Credit Hours: 19-21

## Description

The purpose of this certificate is to develop knowledgeable construction workers with basic skills in construction. With a combination of classroom education, practical lab exercises and co-op internships, students will exit this certificate program with a solid introduction into carpentry, concrete finishing and residential electrical systems.

## Career Opportunities

Entry-level construction workers are in continuous demand for residential and commercial construction.

## Program Requirements

- CAT 1701 - Construction Craft Skills/Concrete OR
- CAT 1810 - Construction Techniques I
- CAT 1721 - Structural Framing Systems OR
- CAT 1820 - Construction Techniques II
- CAT 1741 - Residential Electrical Systems OR
- CAT 1830 - Construction Techniques III
- CAT 1761 - Interior \& Exterior Finishes OR
- CAT 1840 - Construction Techniques IV
- CAT 1781 - Construction Project
- CAT 2702 - Construction Management Technology Internship OR
- CAT 2431 - OSHA Construction Standards
- CAT 2435 - Construction Credentials


## Continuous Process Improvement, STC

## Program Code: CTIM.S.STC • Credit Hours: 12

## Description

This short-term certificate promotes technical communication skills and teamwork, project management skills, lean manufacturing and continuous improvement skills, application of quality principles, statistics and probability theories, and problem-solving skills as they relate to process improvement. This program reflects the underlying skills necessary for the successful application of six sigma methodologies and provides practice in measuring and improving processes that suffer from quality, throughput, and waste problems. The courses in this short-term certificate apply directly to the Industrial \& Systems Engineering Technology (OPTIO.S.AAS) degree.

## Career Opportunities

This program reflects the underlying skills necessary for the successful application of six sigma and lean methodologies. A typical title for an employee with these skills is Process Improvement Specialist.

## Program Requirements

- ISE 1101 - Introduction to Industrial \& Systems Engineering Technology
- ISE 1130 - Lean Operations \& Continuous Improvement
- ISE 2220 - Applied Statistics for Process Control \& Improvement
- ISE 2240 - Six Sigma: Green Belt


## Corrections Officer, STC

## Program Code: CJCO.S.STC • Credit Hours: 24

## Description

This certificate is designed to provide the student with the basic skills necessary for entry-level employment as a corrections officer. All courses can be applied to the Associate of Applied Science Degree in Corrections.

## Career Opportunities

The Corrections Officer Certificate will prepare students for a broad range of careers in local and state correctional facilities in addition to private prison corporations.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1105 - Criminal Law
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1165 - Corrections OR
- CJS 1197 - Corrections Full Service Jails/Basic Correction Officer

Academy

- CJS 2111 - Ethics \& Professionalism in Criminal Justice
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- ENG 1101 - English Composition I


## CPA Exam Eligibility: Accounting Component, STC

Program Code: CPAACC.S.STC • Credit Hours: 24

## Description

In order to be eligible to sit for the CPA examination in the state of Ohio, a candidate must have 24 semester hours of business courses plus 30 semester hours of accounting courses. This certificate is designed for the student to obtain the accounting courses to sit for the CPA exam. It will provide the pathway for a student who has earned a business bachelor's degree to transition to a career in accounting. If a student has a non-business bachelor's degree, they will also need to complete the CPA Exam Eligibility: Business Component certificate.

## Career Opportunities

Employment opportunities in addition to accounting firms, exist in private business and industry as well as not-for profit and governmental organizations. Positions available to graduates include staff accountant, cost accountant, payroll accountant, auditor, tax accountant and financial analyst.

## Program Requirements

- ACC 1510 - Computerized Accounting Systems
- ACC 2101 - Intermediate Accounting I
- ACC 2102 - Intermediate Accounting II
- ACC 2211 - Cost Accounting
- ACC 2212 - Managerial Accounting \& Finance
- ACC 2321 - Federal Taxation
- ACC 2435 - Auditing
- ACC 2322 - Advanced Taxation OR
- ACC 2510 - Advanced Accounting


## Customer Service Specialist, STC

## Program Code: CUS.S.STC • Credit Hours: 3

## Description

This one course certificate is designed for those seeking employment within a call center environment or those interested in improving their customer service skills and telephone techniques. Call centers have become quite sophisticated with effective measures for productivity. Students will learn how a call center operates and how the productivity measures are used.

Program Requirements

- MAT 1455 - Introduction to Data Science
- BIS 1400 - Customer Service


## Data and Information Management, STC

## Program Code: DIM.S.STC • Credit Hours: 18

## Description

Business analytics is expanding across industries as data is being used to inform business decisions. Students will learn to use various software applications to extract, prepare and visualize data to make business decisions.

## Career Opportunities

Prepares students for entry-level business analytics positions requiring knowledge, setup, and usage of business intelligence and business solutions.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1230 - Spreadsheet Software
- BIS 1260 - Database Software
- CIS 1160 - Introduction to Data Literacy
- CIS 2265 - Data Visualization with Tableau
- MAT 1120 - Business Mathematics


## Data Fundamentals, STC

## Program Code: DF.S.STC • Credit Hours: 23

## Description

This short term certificate provides the fundamental skills needed to prepare the IT professional for careers in data analytics. Students will have the ability to mine, organize, analyze, and visualize data in a way that is meaningful to organizations. All courses in this short-term certificate apply to the Data Analytics degree.

## Career Opportunities

Opportunities include positions such as Data Engineer, Data Analyst, Business Intelligence Analyst, Data Manager, Visualization Analyst and Business Systems Analyst.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 2165 - Database Management
- CIS 2265 - Data Visualization with Tableau
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- CIS 2269 - Data Analytics Theory \& Solutions


## Deaf Studies ASL.S.STC

## Program Code: ASL.S.STC • Credit Hours: 18

## Description

Students completing this certificate will obtain valuable knowledge regarding Deaf Culture and American Sign Language. This certificate shows a conversational level of American Sign Language skill. Students seeking another degree or certificate may find this credential allows them to highlight additional language skills. This certificate does not teach interpreting nor is the holder of this certificate qualified as an ASL-English Interpreter. A grade of C or better is required in all ASL courses.

## Career Opportunities

Students may pair the Deaf Studies Short Term Certificate with any field in which they interact with people. As the third most used language in the United States, American Sign Language is beneficial to any individual in any career field. Students will be able to use the skills learned during the Deaf Studies Short Term Certificate courses to communicate directly with Deaf/deaf/Hard of
Hearing/DeafBlind/DeafDisabled users of American Sign Language.

## Program Requirements

- ASL 1101 - Orientation to Deafness
- ASL 1111 - Beginning American Sign Language I
- ASL 1112 - Beginning American Sign Language II
- ASL 1228 - Intermediate American Sign Language I
- ASL 1229 - Intermediate American Sign Language II
- ENG 1101 - English Composition I


## Dental Assisting, STC

## Program Code: DAS.S.STC • Credit Hours: 17

## Description

The student will be introduced to the fundamentals of working in a dental office as a chair-side dental assistant. Concepts and techniques of basic equipment, four-handed dentistry, oral evacuation, instrument identification, and proper use are discussed. Introduction to dental specialties are discussed. Oral examination, charting, medical and dental histories, sterilization, lab, and infection control procedures are emphasized. You are encouraged to complete Cardiopulmonary Resuscitation for the Health Care Provider (or ALH 1130 - Basic Life Support Training for Healthcare Provider) prior to entry to the Dental Assisting program. However, you can take it the first semester. Note: ALH 1130 will be waived for anyone with proof of American Heart Association Healthcare Provider Basic Life Support, see Academic Advising. Upon completion of this short-term certificate the graduate will be eligible to sit for the American Medical Technologies RDA examination. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student
under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Career options may vary according to state practice act restrictions. Dental assistants have a variety of career opportunities in a wide range of employment settings, including private practice, specialty practice, hospitals, HMOs, community health programs, school systems, dental product research, military bases, and secondary education settings.

## Program Prerequisite(s)

- ALH 1130 - Basic Life Support Training for Healthcare Provider AND
- Approval of Department AND
- GPA of 2.0 or Higher AND
- Completion of SCC Distance Learning Course AND
- Completed Program Application


## Program Requirements

- ALH 1130 - Basic Life Support Training for Healthcare Provider
- COM 2206 - Interpersonal Communication
- DAS 1102 - Introduction to Dental Assisting Terminology
- DAS 1104 - Dental Assisting Techniques \& Materials I
- DAS 1105 - Lab Dental Assisting Techniques \& Materials I
- DAS 1204 - Dental Assisting Techniques \& Materials II
- DAS 1205 - Lab Dental Assisting Techniques \& Materials II
- DAS 1108 - Dental Assisting Office Management
- DAS 1206 - Dental Assisting Radiography
- DAS 1207 - Lab Dental Assisting Radiography


## Design Processes, STC

Program Code: VISDP.S.STC • Credit Hours: 20

## Description

This certificate provides an introduction to the design process including hand sketching, development of thumbnails, digital illustration and imaging, page layout; and, composition techniques to support a variety of entry-level design positions. Students will be exposed to the latest version of the Adobe products.

## Career Opportunities

Students will be able to obtain entry-level positions in the field of print/graphic design.

## Program Requirements

- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1150 - Design Processes II
- VIS 1220 - Typographic Design
- VIS 1250 - Print Production


## Dietary Manager, STC

## Program Code: DMST.S.STC • Credit Hours: 16

## Description

Graduates of the Dietary Manager (DM) Program are trained foodservice professionals in health care delivery systems. They understand basic nutritional needs of clients and work in partnership with dietitians, who offer specialized nutritional expertise. Approved by the Association of Nutrition and Food Professionals (ANFP), the curriculum includes 12 semester credit hours of classroom instruction, 2 semester credit hours of food lab instruction, and 200 hours of management and clinical directed practice coordinated by a Registered Dietitian Nutritionist (RDN). A minimum of 25 clinical directed practice hours are directly supervised by a RDN. Students are required to complete these field experiences at area community, foodservice and health care facilities. The program offers two tracks; one for students pursuing careers in Nutrition and Dietetics, and another track for students pursuing careers in Hospitality Management \& Tourism. Both tracks are designed to be completed in two (2) part-time consecutive terms. As an integral member of the health care and foodservice management teams, dietary managers are responsible for maintaining cost/profit objectives, purchasing goods and services for the department and supervising staff. Students of Sinclair's Dietary Manager Program are eligible to become pre-professional members of the Association of Nutrition \& Foodservice Professionals (ANFP), a nationally recognized organization that can be reached at PO Box 3610, St. Charles, IL 60174, 1-800-323-1908, www.anfponline.org This specially designed program enables students to enjoy benefits of ANFP membership while attending school. Graduates are eligible for professional ANFP membership. Benefits include networking, professional growth, educational enrichment, and developing leadership skills. Completion of the DM Program and successfully passing a national credentialing exam will enable graduates to become Certified Dietary Managers, Certified Food Protection Professionals (CDM, CFPPs) in accordance with the Certifying Board for Dietary Managers at https://www.cbdmonline.org/. The DM Program is fully approved by the Association of Nutrition and Foodservice Professionals (ANFP). Students must pass all DM certificate program courses with a "C" or better. The Sinclair nutrition and dietetics programs are open to those age 16 and older.

## Career Opportunities

Graduates of Sinclair's Dietary Manager program can find employment in nutrition and dietary departments in hospitals, long-term care facilities, day care centers, school foodservice systems, correctional institutions and other noncommercial foodservice settings. Dietary managers may work as food service directors, assistant foodservice directors, supervisors, clinical care professionals, multi-department managers, high-level administrators in large service organizations, consultants or entrepreneurs.

## Program Requirements

- DIT 1105 - Exploration of the Nutrition \& Dietetics Profession
- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2180 - Medical Nutrition Therapy for Dietary Managers
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems
- DIT 2515 - Foodservice Systems Directed Practicum
- DIT 2520 - Food Science Lab II
- DIT 2735 - Foodservice Retail Business Management \& MidProgram Assessment
- DIT 2740 - Retail Business Management Directed Practicum


## Digital Marketing Analytics, STC

## Program Code: DMA.S.STC • Credit Hours: 12

## Description

The Digital Marketing Analytics Short-Term Certificate is designed to introduce, develop and reinforce basic digital marketing analytics skills and technical applications. Graduates learn how to monitor digital campaigns, collect metrics, and report findings using Google Analytics and other industry-relevant digital analysis applications. The ten-year occupational outlook for digital marketing specialists shows an anticipated $24 \%$ growth potential. All courses in this certificate can be applied to the Associate of Applied Science in Digital Marketing.

## Career Opportunities

Students obtaining the Digital Marketing Analytics Certificate will be able to work in any size organization that is using digital marketing and social media marketing. The certificate is not only for individuals that are new to the field of marketing, but to those individuals that are already working in the field, and want to update their skill set to include digital marketing analytics.

## Program Requirements

- MRK 2100 - Foundations of Marketing OR
- MRK 2101 - Principles of Marketing Management
- MRK 2135 - Digital Marketing
- MRK 2230 - Social Media \& Consumer Engagement
- MRK 2250 - Digital Marketing Analytics


## Digital Systems, STC

## Program Code: DS.S.STC • Credit Hours: 12

## Description

This short-term certificate offers knowledge and basic skills to work in the electronics industry as an entry-level support technician for digital systems. Courses provide knowledge about basic electrical measurement techniques, prototype assembly of electrical circuits, digital logic, Boolean algebra and basic digital systems. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and lab skills. The courses in this certificate lead into an associate degree in Electronics Engineering Technology at Sinclair.

## Career Opportunities

Provides opportunity to work as a support technician in the digital electronic field.

## Program Requirements

- EET 1150 - DC Circuits
- EET 2261 - Microprocessors
- EET 1131 - Digital Electronics

Digital Thread Engineering Technology, STC

## Program Code: DTET.S.STC • Credit Hours: 16

## What is the program about?

The Digital Thread Engineering Technology short-term technical certificate prepares students for entry-level positions requiring an ability to identify and effectively utilize digital thread and engineering tools related to manufacturing, logistics, data management, and cyber security.

## Career Opportunities

There is a rapidly growing need for technicians with experience in digital thread engineering technology. Students that complete this program will be well positioned to enter or advance in positions focused digital thread technologies, including those related to technician level manufacturing, logistics, data management, cyber security. Requirements for these skills are prevalent and growing in positions in government, industry, and academic organizations, both locally and nationally. Additionally, students completing the program will be prepared to pursue additional certificate and degree programs to further enhance their capabilities and skills.

## Program Requirements

- BIS 1010 - Digital Thread Data Management
- CIS 1010 - Digital Thread Cyber Security
- ISE 1401 - Introduction to Digital Thread Technology
- ISE 1402 - Digital Thread Enabled Manufacturing
- MAN 1010 - Digital Thread Enhanced Logistics
- MET 1131 - Personal Computer Applications for Engineering

Technology OR

- MET 1161 - Software Tools for Engineering Technology


## Dining Assistant, STC

## Program Code: DAST.S.STC • Credit Hours: 1

## Description

The Dining Assistant Program is a State of Ohio approved training course which provides practical skill development in feeding techniques and working with populations with self-feeding difficulties with a focus on the elderly. The program is designed to ensure that Dining Assistants have a basic understanding of the nutritional needs of long term care residents, communications and interactions involving
the residents and staff, as well as behavior challenges and safety procedures involving residents.

## Career Opportunities

Students successfully completing the Dining Assistant short term certificate program will be eligible to apply for feeding assistant positions within the nutrition departments of long term care facilities in the state of Ohio.

## Program Requirements

- DIT 2101 - Dining Assistant Dietary Aide


## East Asian Studies, STC

## Program Code: EAS.S.STC • Credit Hours: 17

## Description

This short-term East Asian Studies Certificate is an interdisciplinary program consisting of five courses on East Asian history, language, culture, and business in the global context. The program is designed to provide students with in-depth study and training in the listed areas to complement their major field of study. The program prepares students for multiple academic and career paths with useful skills and worldly perspectives.

## Career Opportunities

Upon completion of the East Asian Studies certificate program, students will gain proficiency in East Asian history and Chinese or Japanese language with intercultural and international business skills. Students will be able to pursue careers in the following capacities: Employment in multicultural and international corporations, Work at a local company related to East Asia like Fuyao Inc. or Honda Inc., be part of the foreign services, military service, judicial system, or in language translation, work as a consultant in fields like international politics, financial advisor for Asian markets, international marketing specialist, teaching at schools or universities or become a politician or a community leader.

## Program Requirements

- CHN 1101 - Elementary Chinese I AND
- CHN 1102 - Elementary Chinese II

OR

- JPN 1101 - Elementary Japanese I AND
- JPN 1102 - Elementary Japanese II
- COM 2245 - Intercultural Communication
- HIS 2217 - Survey of East Asian History
- MAN 1110 - International Business


## Electrocardiography, STC

## Program Code: ELST.S.STC • Credit Hours: 3

This program is intended to provide expanded skills among health care professionals as well as current Health Sciences students to increase marketability for employment. Electrocardiography (ECG) Technicians operate equipment that records and measures heart activity. These measurements are used to assist cardiologists and other physicians in diagnosing and treating cardiac (heart) and peripheral vascular (blood vessel) problems. Students who complete this program will receive a Short-Term Technical Certificate in Electrocardiography. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

Electrocardiography Technician.

Program Requirements

- ALH 1110 - Principles of Electrocardiography


## Emergency Medical Responder, STC

## Program Code: EMR.S.STC • Credit Hours: 2

## Description

Emergency Medical Responders (EMR's) are personnel, typically not found within the healthcare setting, who as part of their job have to care for the sick and injured before an ambulance arrives. These individuals are educated to stabilize patients using very limited amounts of medical equipment. Police officers, safety officers, and others who would be expected to arrive at the scene of an injury or illness before the ambulance could benefit from this education. Students will use lecture and laboratory environments to learn the skills needed to care for patients. For more information, contact the EMS department at (937) 512-5338 for an entrance application packet.

## Accreditation

This program is accredited by the Ohio Department of Public Safety, Division of Emergency Medical Services. Graduates of this program are eligible to take the National Registry of Emergency Medical Technicians EMR examination. Contact the EMS office at Sinclair Community College for additional information about accreditation or national testing.

## Career Opportunities

EMRs education can be used as within firefighting, police or safety officer roles. Most companies/departments will not hire a person who is solely an EMR. The purpose of this education is to augment the skills of those who may need to care for the sick and injured before the ambulance arrives.

## Program Requirements

- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory


## Description

## Emergency Medical Technician, STC

## Program Code: EBST.S.STC • Credit Hours: 7

## Description

Emergency Medical Technicians (EMTs) are essential members of the health care team who provide time sensitive care to patients. These individuals take the emergency department to people's homes, to highways and to other remote locations. EMTs bring life-saving equipment and knowledge to bear in an effort to reduce patient's suffering and to save lives. Students will use lecture, laboratory and real world exposure to emergencies to learn the skills needed to care for the sick and injured in the out-of-hospital environment. The program is offered to provide students with variability and flexibility in scheduling. For more information, contact the EMS department at 937-512-5338 for an entrance application packet.

## Career Opportunities

Within the greater Miami Valley area, EMS professionals are hired by fire departments, private EMS and hospitals. These agencies typically hire entry personnel based on the candidates state licensures/certifications - not whether the candidate is degreed. When local departments are hiring full-time employees, many of them are looking for paramedic/firefighters.

## Program Requirements

- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician


## Energy and Sustainability Technician, STC

## Program Code: EST.S.STC • Credit Hours: 8

## Description

This short-term certificate is intended for students who are interested in an entry-level position in the energy and sustainability technician field. The student will have the opportunity to earn their OSHA-10 card and have the potential to sit for the LEED Green Associate exam and Building Analyst exam by the Building Performance Institute (BPI).

## Career Opportunities

Career opportunities for students completing this short-term certificate include entry-level building positions as laborers, technicians, installers, operators, inspectors, and data collectors.

## Program Requirements

- CAT 1431 - OSHA Construction Standards 10 Hour
- EGV 1401 - Weatherization \& Building Performance Training
- EGV 2351 - LEED Green Associate Exam Preparation
- EGV 2700 - Energy Management Technology Internship


## Description

This certificate prepares existing or potential entrepreneurs in a wide variety of small business functions. In addition to a traditional management course, the following key areas are emphasized for entrepreneurs: financial plan development, marketing plan development and business plan development.

## Career Opportunities

Students completing this certificate can expect to be prepared to begin their own business or to work in larger companies in an entrepreneurial role.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- SOC 1101 - Introduction to Sociology
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- ENT 2140 - Small Business Finance
- ENT 2160 - Business Plan Development
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MRK 2220 - Small Business Marketing


## Expanded Functions for Dental Auxiliaries, STC

## Program Code: EFDA.S.STC • Credit Hours: 13

## Description

The Expanded Functions Dental Auxiliary (EFDA) Certificate is designed to prepare graduates for positions in private practice dental offices, dental clinics, federal, state and municipal health facilities. The Ohio State Dental Board allows Certified Dental Assistants, Registered Dental Assistants, and Registered Dental Hygienists to enroll in this training. Emphasis is placed on sealants, amalgam restorations, composite restorations and temporary restorations. Students will receive instruction and hands-on experience in restorative dentistry as it relates to expanded functions in Ohio. Once the training is complete, the student must take a state written and practical exam to demonstrate proficiency in placement of dental restorations. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll.

## Career Opportunities

The Expanded Functions Dental Auxiliary Profession offers opportunities with excellent income and flexible scheduling. While
most EFDAs work in general and specialty dental offices, alternative career opportunities are available. These include public health departments, community programs and clinics, teaching institutions, consumer advocate and consulting.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- EFD 1102 - Dental Anatomy for Dental Auxiliaries
- EFD 1202 - Expanded Functions for Dental Auxiliaries I
- EFD 1203 - Lab for Expanded Functions for Dental Auxiliaries I
- EFD 1302 - Expanded Functions for Dental Auxiliaries II
- EFD 1303 - Lab for Expanded Functions for Dental Auxiliaries II

Family Advocate, STC

## Program Code: FAMA.S.STC • Credit Hours: 18

## Description

A short-term certificate competency based, task-specific training for Head Start Family Specialists, Family Service Specialists and Family Workers whose job it is to provide the support services which are needed by families to enhance the quality of their family life. Courses in this curriculum will focus on achieving proficiency in the following areas: social work core knowledge, values, skills; social work ethics and theory, interviewing and documentation; group/organization and micro-level methodologies; collaboration and advocacy; understanding family dynamics, barriers to self-sufficiency, conflict resolution, cultural and social diversity issues, the relationship between social problems and institutional responses; aid in the development of beginning computer skills.

## Career Opportunities

This certificate enhances career opportunities in agencies and organizations that provide a wide variety of social services.

## Program Requirements

- COM 2206 - Interpersonal Communication
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work

Fast Track Programming, STC

Program Code: FTPA1.S.STC • Credit Hours: 19

## Description

This certificate assures that individuals are equipped with current software development skills. It is intended either for experienced programmers looking to update their skill set or for people wishing to make a career change into the Information Technology field. The certificate focuses on the latest software development languages and approaches, object-oriented concepts and database theory.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts, and network engineers.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer Programming
- CIS 1140 - Information Systems Analysis \& Design
- CIS 1202 - C++ Software Development OR
- CIS 2266 - Python for Data Analytics OR
- CIS 2207 - Data Structures \& Algorithms
- CIS 2165 - Database Management
- CIS 2212 - Java Software Development I
- CIS 2217 - Java Software Development II


## Fire Department Company Officer, STC

## Program Code: FCO.S.STC • Credit Hours: 5

## Description

Develop management, supervision and leadership skills that companygrade officers need to manage and command multi-company fire situations. This certificate meets the objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications Level II.

## Accreditation

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Program Prerequisite(s)

- Approval of Department AND
- Certified Ohio Firefighter AND
- At least three years active duty experience.

Program Requirements

- FST 2251 - Fire Officer I
- FST 2252 - Fire Officer II

Fire Department Executive Officer, STC

## Description

Develop management, supervision and leadership skills required by upper-level executive-grade officers. These skills are needed to effectively manage fire protection and emergency services in today's complex fire service environment and command complex multicompany and multi-jurisdictional emergency incidents. This certificate meets objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications Levels III and IV.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- FST 2253 - Fire Officer III
- FST 2254 - Fire Officer IV


## Firefighter EMT, STC

## Program Code: FEMT.S.STC • Credit Hours: 19

## Description

This program provides training as outlined by the Ohio Division of Emergency Medical Services (state accrediting body) for Firefighter I, Firefighter II and Emergency Medical Technician. Sinclair Community College complies with all requirements as outlined by the Ohio Division of Emergency Medical Services. Successful students will be eligible to sit for state certification testing and eventually be eligible to become licensed/certified as a Firefighter I, Firefighter II, and EMT.

## Accreditation

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Career Opportunities

Students completing this program will find career opportunities in fire departments, private EMS agencies, and hospitals.

## Program Prerequisite(s)

## Approval of Department

## Program Requirements

- EMS 1150 - Emergency Medical Technician: Lecture
- EMS 1155 - Laboratory for Emergency Medical Technician
- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Food Production Specialist, STC

## Program Code: FPS.S.STC • Credit Hours: 28

## Description

The Food Production Specialist Certificate combines classroom instruction and laboratory experience in food preparation and service for the restaurant and catering industry.

## Career Opportunities

Employment opportunities after completing the Food Production Specialist Certificate and Bakery Specialist or Pastry Specialist include: short order cook, fast food cook, food preparation worker, baker, pastry cook, and galley cook.

Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1106 - Transition Skills
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior
- HMT 1101 - Basic Culinary Skills
- HMT 1102 - Kitchen Chemistry
- HMT 1105 - Introduction to the Hospitality \& Tourism Industry
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 2215 - Hospitality Cost Controls
- MAT 1120 - Business Mathematics

Food Truck and Street Foods, STC

Program Code: FTSF.S.STC • Credit Hours: 15

## Description

Food Trucks and Street Foods have moved into the epicurean spot light in recent years and have moved from the fad stage into the newest and hottest food trend sweeping across America and beyond. In this shortterm certificate students will learn how to set-up and design a food truck operation as well as the requirements for food booths and mobile food stations.

## Career Opportunities

Street Food \& Food Trucks are ready-to-eat food or drink sold by a vendor, in a street or other public place, such as at a market or fair. It is often sold from a portable food booth, food cart, or food truck and meant for immediate consumption. Students will learn all the steps to creating a profitable operation of a street foods meals.

Program Prerequisite(s)

- HMT 1101 - Basic Culinary Skills AND


## Program Requirements

- HMT 1101 - Basic Culinary Skills
- HMT 1107 - Sanitation \& Safety
- HMT 1112 - Food Principles \& Basic Preparation
- HMT 1129 - Restaurant Desserts
- HMT 2203 - Street Foods \& Food Trucks


## General Aviation Maintenance, STC

## Program Code: GAM.S.STC • Credit Hours: 23

## Description

The General Aviation Maintenance certificate provides foundational knowledge and skills required by the Federal Aviation Administration (FAA) for the Aviation Maintenance Technician (AMT) student. To become an AMT, two ratings are required, the Airframe (A) and the Powerplant (P); this is commonly referred to as an "A\&P Certificate". The GAM.S.STC, the Airframe Maintenance (AAM.S.CRT) and Powerplant Maintenance (PPAM.S.STC) certificates are needed to qualify the student to become an AMT. Students will learn to apply mathematics and physics, read and interpret aircraft drawings, conduct ground operations and servicing of aircraft, interpret maintenance publications, interpret FAA regulations, make correct and legal aircraft record entries, perform weight and balance calculations, understand basic electricity, understand makeup of materials used in aircraft manufacture, understand aircraft fasteners, inspect welds, inspect for aircraft deterioration (corrosion) and understand and perform aircraft repair methods. Students will learn to apply the knowledge and skills they have learned with extensive hands-on training in the aviation maintenance lab. Sinclair is an FAA-approved Aviation Maintenance Technician School (AMTS) under Part 147.

## Career Opportunities

The Aviation industry is experiencing a pressing shortage of aviation mechanics. In its most recent pilot and technician outlook report, issued in 2020, Boeing estimated that 739,000 new technicians would be needed worldwide during the next 20 years, much of it due to the large number of recent and upcoming retirements in the field...that includes 192,000 new technicians needed in North America.

## Program Requirements

- AVT 1113 - Drawings for Aviation
- AVT 1116 - Regulations for Maintenance
- AVT 1118 - Weight \& Balance
- AVT 1132 - Basic Aviation Electricity II
- AVT 1135-Materials \& Processes
- AVT 1213 - Corrosion
- AVT 2143 - Review \& Recommendation
- AVT 2237 - Aircraft Inspections


## Geographic Information Systems, STC

## Description

The Geographic Information Systems (GIS) short-term certificate will provide students with both theoretical and practical applications of GIS. The certificate will cover the foundational concepts in GIS, including the principles of cartography and GIS, database management and analysis, data acquisition, and manipulation of georeferencing and geocoding.

## Career Opportunities

Students completing the certificate will have the technical skill set in GIS required to perform a variety of entry level positions in a variety of arenas, including, regional and local government agencies, business and community organizations.

## Program Requirements

- CIS 2165 - Database Management
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 1209 - Map Design \& Visualization
- GEO 2210 - Advanced Spatial Analysis
- MAT 1450 - Introductory Statistics


## Geospatial Technology Analyst, STC

## Program Code: GSTA.S.STC • Credit Hours: 22

## Description

The Geospatial Technology Analyst short-term certificate will provide students with both theoretical and practical applications of Geographic Information Systems (GIS). The certificate will cover the foundational concepts in GIS, database management and analysis, data acquisition, and manipulation of georeferencing and geocoding.

## Career Opportunities

This certificate is designed for those students who seek to enhance their job-related skills in becoming a GIS analyst. The U.S. Department of Labor Employment and Training Administration (DOLETA), for example, cites an annual growth rate of approximately 35 percent for the geospatial technology industry. Students completing the certificate will have the technical skill set in GIS required to perform a variety of entry level positions in a variety of arenas, including, regional and local government agencies, business, and community organizations.

## Program Requirements

- AVT 1120 - Electro-Optical \& Infrared Data Analysis OR
- AVT 1121 - Multispectral \& Hyperspectral Data Analysis
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1107 - Introduction to Geographic Information Systems (GIS) OR
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II
- GEO 1215 - Introduction to Remotely Sensed Imagery OR
- EET 1121 - UAS Remote Sensing \& Analysis AND
- EET 1158 - Aerospace Spatial Visualization
- GEO 2210 - Advanced Spatial Analysis


## Geospatial Technology Programming Specialist, STC

## Program Code: GST.S.STC • Credit Hours: 20

## Description

Students learn advanced applications in geographical information system software, ArcGIS; C++ software programming skills; how to design and implement websites for internet delivery of data; design and administer relational databases; query databases using SQL.

## Career Opportunities

Graduates of this certificate will be able to build upon already existing programming skills to find employment in government and within private industry employing computer programmers with general GIS skills and knowledge such as: Database Developer or Software Applications Programmer. According to the Bureau of Labor and Statistics (www.bls.gov), "As a result of rapid employment growth over the 2008 to 2018 decade, job prospects for computer software engineers should be excellent."

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2266 - Python for Data Analytics
- CIS 2268 - Structured Query Language (SQL) Programming
- GEO 1103 - Introduction to Geographic Information System I AND
- GEO 1104 - Introduction to Geographic Information Systems II OR
- GEO 1107 - Introduction to Geographic Information Systems (GIS)
- GEO 2210 - Advanced Spatial Analysis


## Global Studies, STC

## Program Code: GSC.S.STC • Credit Hours: 24-25

## Description

The Global Studies Certificate provides students seeking a multicultural credential an opportunity to earn a short-term certificate that is completely aligned with a variety of AA degrees. Sinclair students with the desire to acquire knowledge and analytical skills in political, social, historical, scientific, linguistic, economic and cultural aspects are well suited for pursuing this certificate.

Designed for students who are planning on using Global Studies to enhance their careers in: global cultural industries in music, film, sports, and consumer life; global environmental management; global health; global marketing; human justice organizations; international governance; international humanitarian service; international development agencies; international business; mass communication; travel, tourism and international hospitality management; and United States government offices and agencies. The student who pursues this short-term technical certificate would plan to use this to supplement their professional development or to strengthen a major for which Global Studies is a strong base.

Program Requirements

- SCC 1101 - First Year Experience
- SOC 1145 - Introduction to Cultural Anthropology
- GEO 1101 - Global Forces, Local Diversity OR
- GEO 1102 - Earth's Physical Environment OR
- GEO 1201 - World Regional Geography: People, Places \& Globalization
- Language Electives $\mathbf{8 C r} . \mathbf{H r}(\mathbf{s})$.
- HIS 1101 - United States History I OR
- HIS 1111 - Western Civilization I OR
- HIS 1112 - Western Civilization II OR
- HIS 2215 - Survey of African History OR
- HIS 2216 - Survey of Latin American History OR
- HIS 2217 - Survey of East Asian History OR
- HIS 2219 - Survey of the Middle East OR
- HUM 1125 - Introduction to the Humanities OR
- PHI 2205 - Introduction to Philosophy
- PLS 2200 - Political Life, Systems \& Issues OR
- PLS 2220 - International Relations OR
- PLS 2860 - Model UN/International Issues
- REL 1111 - Eastern Religions OR
- REL 1112 - Western Religions


## Greenhouse Technician, STC

## Program Code: GHT.S.STC • Credit Hours: 16

## Description

The Greenhouse Technician Certificate will equip students with basic knowledge of plant science that is used for the growth, development, and utilization of cultivated plants. This knowledge will allow the students to propagate plants, implement sustainable landscape design, understand the science of soil, and will ultimately enable the student to operate and manage a greenhouse.

## Career Opportunities

Graduates of the Greenhouse Technician Certificate program are employable as entry-level positions in the nursery, landscape, or agricultural industry. Instruction and practical application of learned

## Career Opportunities

skills provide a broad occupational background that appeals to prospective employers.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1201 - Horticulture I
- AGR 1205-Greenhouse Management
- AGR 1206 - Horticulture II
- AGR 1207 - Greenhouse Applications
- AGR 1208 - Sustainable Landscape Design


## Home Health Aide, STC

## Program Code: HCA.S.STC • Credit Hours: 7

## Description

The Home Health Aide certificate prepares students to perform the basic skills necessary to provide personal care services and activities to elderly, convalescent, or disabled persons in the home of patients or in a residential care facility. Students will be able to demonstrate basic nursing care and the skills required to promote health and healing for patient, as well as implement nursing care that decreases risks and follows safety procedures. Upon completion of ALH 1120 - Nurse Aide Training, students are eligible to sit for the State Test for Nurse Aide Training to become a State Tested Nurse Aide (STNA).

## Career Opportunities

Career opportunities for Home Health Aide include, but are not limited to, hospitals, home health care, long-term care and rehabilitation centers.

## Program Requirements

- ALH 1120 - Nurse Aide Training
- ALH 1250 - Health Science Practicum


## Hospitality Reception and Service Specialist, STC

## Program Code: HRSS.S.STC • Credit Hours: 2

## Description

This certificate prepares individuals to work in the luxury service environment, while mastering the importance of soft-skills and strategies to resolve some of the most difficult challenges involving high end hospitality clientele.

## Career Opportunities

Upon completing this credential, students will have gained the knowledge for entry level employment as a guest relations associate within an upscale hotel, matre d for a fine dining establishment, receptionist at an established travel firm, or sales associate for a convention bureau. Ultimately, this is the first step toward completing a Degree in Hospitality Management.

Program Requirements

- HMT 1105 - Introduction to the Hospitality \& Tourism Industry


## Human Resource Management, STC

## Program Code: HRMT.S.STC • Credit Hours: 18

## Description

This certificate provides the opportunity to develop and refine human resources skills. The curriculum covers laws and regulations related to employment, implications of decisions and their effect on business as well as employee motivation. Also addresses human resource applications in strategic human resource management, workforce planning and employment, human resource development, total compensation and rewards, employee and labor relations and risk management. Contemporary approach to human resource management using a diagnostic model of internal and external influences.

## Career Opportunities

Students completing this certificate will be qualified to apply for Human Resource Specialist positions, in some cases, or will be prepared to further their studies in the human resources area within a four-year institution.

## Program Requirements

- COM 2206 - Interpersonal Communication
- FIN 2450 - Personal Finance
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2150 - Management \& Organizational Behavior
- MAN 2155 - Management Information Systems


## Industrial Maintenance Technician, STC

Program Code: INDMT.S.STC • Credit Hours: 26-28

## Description

The Industrial Maintenance Technician certificate provides the knowledge and skill required for installing, maintaining and troubleshooting modern industrial machinery. Students will learn to solve practical maintenance problems, read and interpret mechanical drawings and interpret maintenance publications.

## Career Opportunities

This certificate will provide the necessary background to perform industrial maintenance operations on a wide range of electromechanical equipment.

## Program Requirements

- EET 1120 - Introduction to DC \& AC Circuits
- EET 1139 - Electrical Machinery
- EET 1166 - Industrial Machine Wiring
- EET 2281 - Programmable Logic Controllers
- EGR 1106 - Basic Mechanical \& Electrical Skills
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM)

Systems

- EGR 1144 - Sensors \& Vision Systems
- EGR 1217 - Fluid Power \& Control
- EGR 2231 - Troubleshooting of Automated Systems
- MET 1301 - SolidWorks Basics OR
- CAM 1107 - Introduction to Mechanical Drafting with CAD


## Industrial PLC Programming Technician, STC

## Program Code: PLC.S.STC • Credit Hours: 8-10

## Description

This certificate provides students and working professionals the basic necessary knowledge and skills to operate, program, and diagnose Programmable Logic Controller (PLC) based control systems in advanced manufacturing automation process operations, Original Equipment Manufacturer (OEMs), and logistics/supply chain high-tech warehousing automation operations. This program covers digital fundamentals used in all of today's computers, PLC hardware, PLC ladder logic programming, PLC I/O wiring diagrams, PLC communication architecture, networking, HMIs (Human Machine Interface) in a hands-on learning environment on several different types of PLCs.

## Career Opportunities

Graduates will be qualified for entry level work as a PLC technician for original equipment/system suppliers, consultants/third party support, as well as, equipment/system end users. Manufacturing industries that require PLC Programming Technicians include food, pharmaceutical, defense, aerospace, chemical, plastics, steel, metals, paper, textiles, and automotive industries. Graduates typically work in manufacturing process support, maintenance support, engineering support, sales/service support, or consulting functions. All courses within certificate may be applied towards a degree in Automation \& Control Technology with Robotics, a high demand, high paying field.

## Program Requirements

- EET 1198 - Digital Technology OR
- EET 1131 - Digital Electronics
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers


## Industrial Robotics \& PLC Programming Technician, STC

## Program Code: IRPLC.S.STC•Credit Hours: 17-19

## Description

This certificate extends the knowledge and skills students learn in the Industrial PLC Programming Technician certificate by teaching
students to operate, program, and troubleshoot robotic-cells and control systems used in advanced manufacturing operations, Original Equipment Manufacturer OEMs, logistics/supply chain centers, and automated warehousing operations. This program covers digital fundamentals common to today's computers, basics of automated systems, Robotic Teach Pendant Programming (TPP), Robotic Handling Tool fundamentals, Programmable Logic Controller (PLC) hardware, PLC ladder logic programming, PLC I/O wiring diagrams, PLC communication architecture, networking, Human Machine Interface (HMIs) in a "hands-on" learning environment setting.

## Career Opportunities

This certificate program will provide the education and training necessary to operate, program, diagnose, and repair PLC \& industrial robots. Graduates will be qualified to work for original equipment/system suppliers, consultants/third party support, as well as, manufacturing and supply/chain logistics warehousing equipment/system end users. All courses within certificate may be applied towards a degree in Automation \& Control with Robotics, a high demand, high paying field.

## Program Requirements

- EET 1198 - Digital Technology OR
- EET 1131 - Digital Electronics
- EET 2281 - Programmable Logic Controllers
- EET 2282 - Advanced Programmable Logic Controllers
- EGR 1128 - Robotics in Computer Integrated Manufacturing (CIM) Systems
- EGR 2231 - Troubleshooting of Automated Systems
- EGR 2252 - Teach Pendant Robot Programming

Information Systems Security, STC

## Program Code: ISSC.S.STC • Credit Hours: 18

## Description

This certificate will help prepare students and working professionals to perform effectively in the Information Assurance area of Information Technology. The courses required for this certificate have been reviewed and validated by the NSA. Students completing the courses outlined here will receive the ISSC Certificate jointly issued by Sinclair Community College and the NSA. Because the specified content in these six courses has been approved, course credit earned by articulated or proficiency cannot be accepted.

## Career Opportunities

With the increased awareness of the need for computer and network security in government, industry and education, there are greatly increased opportunities for students prepared to work in Information Assurance. Students and working professionals completing this certificate will have significantly enhanced opportunities to pursue jobs in the Information Assurance arena within the Federal government, Department of Defense and/or private industry

Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2550 - Linux Operating System
- CIS 2630 - Securing a Windows Network Environment OR
- CIS 2650 - Ethical Hacker
- CIS 2640 - Network Security


## International Business, STC

## Program Code: INTB.S.STC • Credit Hours: 18

## Description

This certificate allows students to explore content and experiences relevant to employment in multinational firms and Non-Governmental Organizations (NGOs). Students will learn technical information that is applicable to further study in international business as well as direct employment in organizations operating on a global basis.

## Career Opportunities

Students will have the opportunity to develop knowledge and relationships that lead to employment in multinational organizations. Students will have the foundational knowledge and business contacts to pursue internship and careers throughout the world, if they so choose.

## Program Requirements

- GEO 1201 - World Regional Geography: People, Places \& Globalization
- MAN 1107 - Foundations of Business
- MAN 1110 - International Business
- MAN 2150 - Management \& Organizational Behavior
- SOC 1145 - Introduction to Cultural Anthropology
- Business Management Elective 3 Cr. $\mathbf{H r}(\mathbf{s})$.


## Business Management Elective

- MAN 2110 - Introduction to Project Management
- MAN 2140 - Human Resource Management
- MAN 2144 - Negotiation Techniques
- MAN 2159 - Supply Chain Management Concepts \& Applications
- MAN 2270 - Management Internship
- MAN 2279 - Business Management Capstone
- MRK 2100 - Foundations of Marketing
- MRK 2101 - Principles of Marketing Management
- MRK 2135 - Digital Marketing


## Internet of Things Technician, STC

## Program Code: IOTT.S.STC • Credit Hours: 19

## Description

This short term certificate offers knowledge and basic skills to work in the electronics/programming industry as an entry-level support technician for Internet of Things (IoT). In addition to advanced manufacturing, a growing portion of IoT devices are created for consumer use, including connected vehicles, home automation, wearable technology, connected health, and appliances with remote monitoring capabilities. Micro-controllers are the heart of any IoT device. Graduates learn micro-controller hardware, programming applications, networking, and security. Theoretical aspects are supported and supplemented by hands-on lab work to gain in-depth knowledge and necessary technical skills.

## Career Opportunities

This certificate program will provide the entry level education and training necessary to operate, program, diagnose, and repair microcontroller based Internet of Things (IoT) devices. Graduates will be qualified to work for original equipment/system suppliers, consultants/ third party support, as well as, equipment/system end users. This certificate is not only for individuals that are new to the field of IoT, but to those individuals that are already working in the field, and want to update their skill set. All courses within the certificate may be applied towards an Associate in Applied Science degree in Internet of Things Cyber Technician, a high demand, high paying field.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2640 - Network Security
- EET 1198 - Digital Technology
- EET 2261 - Microprocessors
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"


## IT Fundamentals, STC

## Program Code: ITFN.S.STC • Credit Hours: 18

## Description

This certificate provides the fundamental courses needed to prepare for any of the multiple Computer Information Systems (CIS) programs or areas of specialization. It allows students to experience introductory courses in various disciplines as preparation for their chosen degree objective. All courses in this certificate apply to the various degree programs in the Computer Science and Information Technology Department.

## Career Opportunities

Entry level positions in various areas including user support, system administration and network management will be available to students completing this certificate. Many employers are quite willing to provide job specific training to employees already possessing the broad technical experiences in this certificate. Students completing this certificate and a specific CIS degree program will be further prepared for specific employment opportunities.

- BIS 1105 - IT Fundamentals OR
- BIS 1120 - Introduction to Software Applications
- CIS 1107 - Introduction to Operating Systems
- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 1130 - Network Fundamentals
- CIS 1140 - Information Systems Analysis \& Design
- CIS 2165 - Database Management


## Large Animal Care \& Handling, STC

## Program Code: LAC.S.STC • Credit Hours: 16

## Description

This program is designed to introduce the student to working within the agricultural field and will provide a baseline of business, communication, and animal handling knowledge.

## Career Opportunities

Holders of this certificate may be better able to obtain employment, or increase their status as a Farm Worker, Farm Manager, Feed Store Worker, Farm Bureau Representative, or Farm Banking Assistant.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- ENG 1101 - English Composition I
- MAN 1107 - Foundations of Business
- VET 1120 - Introduction to Large Animal Sciences: Handling \& Husbandry
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- MAT 1120 - Business Mathematics OR
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3} \mathbf{~ C r} \mathbf{~ H r}(\mathbf{s})$.


## Law Enforcement, STC

## Program Code: CJLE.S.STC • Credit Hours: 21

## Description

This certificate prepares students for future training and education in the field of law enforcement. This certificate enhances law enforcement professional skills and knowledge. It may assist the student in performing well in future civil service examinations for employment or promotion.

## Career Opportunities

A broad range of career opportunities are available in the area of criminal justice and law enforcement including those in court systems,
court administration, law enforcement agencies, private investigation agencies, and probation and parole.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1103 - Constitutional Law \& Evidentiary Procedures
- CJS 1110 - Interrogation, Documentation \& Testimony
- CJS 1105 - Criminal Law
- CJS 1125 - Policing
- CJS 2111 - Ethics \& Professionalism in Criminal Justice


## Linux Security \& Network Essentials, STC

## Program Code: LSNE.S.STC • Credit Hours: 12

## Description

This certificate is an information technology certificate concentrating on teaching specific skills pertaining to the fundamentals of the Linux operating system, Linux security and network and data communications.

## Career Opportunities

Opportunities include Linux administrators and Linux consultants.

Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2550 - Linux Operating System
- CIS 2640 - Network Security


## Magnetic Resonance Imaging, STC

Program Code: MRI.S.STC • Credit Hours: 5

## Description

The short term certificate in Magnetic Resonance Imaging (MRI) is designed to provide radiographers certified by the American Registry of Radiologic Technologists (ARRT) with didactic and clinical education in Magnetic Resonance Imaging. Didactic courses focus on current MRI principles while clinical courses provide students with real-life experience and development of hands-on skills needed to pursue employment opportunities MRI.

## Career Opportunities

Completion of this short term certificate program can lead to employment in comprehensive hospitals, suburban or rural outpatient centers, surgery centers, etc. as a Magnetic Resonance Imaging Technologist.

## Program Prerequisite(s)

- ISE 2100 - Lean Leadership, Teamwork \& Management
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- ISE 1101 - Introduction to Industrial \& Systems Engineering

Technology

- ISE 1130 - Lean Operations \& Continuous Improvement
- MAN 2110 - Introduction to Project Management


## Mechanical Software Technician, STC

## Program Code: METECH.S.STC • Credit Hours: 16

## Description

The Mechanical Software Technician short term certificate introduces students to the field of mechanical engineering including using the latest versions of computer-aided drafting software. All courses are part of the Mechanical Engineering Technology associate degree.

## Career Opportunities

Professionals with software skills are in demand by mechanical design firms.

## Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- MET 1111 - Preparatory Math for Engineering Technology
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics
- MET 2281 - Engineering Technology Professional Practice
- CAM 1107 - Introduction to Mechanical Drafting with CAD OR
- MET 1151 - Guitar Manufacturing using Science, Technology,

Engineering, \& Mathematics (STEM) Concepts OR

- MET 2700 - Mechanical Engineering Technology Internship


## Mechanical Technician,STC

Program Code: MECHTECH.S.STC • Credit Hours: 20-22

## Description

This program will provide the hands-on skills in mechanical engineering technology and manufacturing to begin entry-level technician jobs, with options open in numerous fields and companies.

## Career Opportunities

The Mechanical Technician certificate introduces students to basic mechanical engineering concepts and prepares them to work as entrylevel technicians in mechanical engineering or related fields.

Program Requirements

- CAM 1109 - Fundamentals of Tooling \& Machining
- EET 1120 - Introduction to DC \& AC Circuits
- EGR 1106 - Basic Mechanical \& Electrical Skills
- MET 1111 - Preparatory Math for Engineering Technology
- MET 2151 - Material Science
- MET 1231 - Introduction to Engineering Design Using 3D CAD OR
- MET 1301 - SolidWorks Basics AND
- MET 1401 - Additive Design \& Printing OR
- MET 2281 - Engineering Technology Professional Practice OR
- MET 2700 - Mechanical Engineering Technology Internship OR
- MET 1151 - Guitar Manufacturing using Science, Technology, Engineering, \& Mathematics (STEM) Concepts


## Medical Coding \& Billing Specialist, STC

## Program Code: MCBS.S.STC • Credit Hours: 24

## Description

This certificate prepares students for entry-level coding and billing positions in physician medical offices, medical insurance companies and outpatient billing services. Students will develop skills to accurately determine diagnostic and procedural code number assignments that impact medical reimbursement. Skill sets include application of ICD-10-CM, CPT and HCPCS coding systems; medical terminology; anatomy and physiology and disease processes; processing insurance claims and reimbursement practices. The Medical Billing and Coding Specialist certificate can be completed in the traditional classroom setting or completely online or a combination of both delivery systems. Students must receive a grade of C or higher in all courses in the MCBS.STC and have a GPA of 2.0 to receive the certificate.

## Career Opportunities

Employment prospects for medical coding and billing specialists are excellent throughout the nation. Career opportunities include: physician medical offices, medical insurance companies and outpatient billing services.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1140 - Fundamentals of Disease Processes
- BIO 1121 - Human Anatomy \& Physiology I
- BIO 1222 - Human Anatomy \& Physiology II
- HIM 1101 - Medical Terminology
- HIM 1165 - Drug Classification for Coding
- HIM 1201 - Introductory Medical Office Coding
- HIM 2262 - Advanced Medical Office Coding
- MAS 2210 - Medical Billing Specialist


## Micro-Electronics Technician, STC

## Program Code: MICRO.S.STC • Credit Hours 18

Description

Course work is designed to rapidly prepare the student for the microelectronics workforce. Micro-electronics includes the exciting areas of digital electronics and integrated circuit (IC) chips that control everything from consumer devices, automobiles, medical devices, appliances, sensors, aerospace, industrial controls, and state-of-the-art internet of things (IoT) technology. Technicians will be prepared to enter integrated circuit fabrication and design workforce.

## Career Opportunities

Chip Fabrication technician, micro-controller programming technician, digital electronics technician, technical support technician, field support technician, consultant.

## Program Requirements

- EET 1116 - Electronics Schematics \& Fabrication
- EET 1120 - Introduction to DC \& AC Circuits
- EET 1198 - Digital Technology
- EGR 2205 - Integrated Circuit (IC) Fabrication Techniques
- MAT 1110 - Math for Technologists
- PHY 1106 - Physics for Technology


## Microsoft Certified Solutions Associate, STC

## Program Code: MCSA.S.STC • Credit Hours: 18

## Description

This certificate and the associated courses will help students prepare for the certification exams needed to earn the designation of Microsoft Certified Solutions Associate (MCSA). This credential and the technical competence, as demonstrated by the certification exams, will help students earn employment in the areas of Network Management, Network Administration and System Administration.

## Career Opportunities

Students completing this short term certificate will be prepared for vendor and/or industry certification exams that are highly desired and valued in the Information Technology field. In turn, these certifications will help prepare students for careers in Network Administration, Network Management, System Administration and other aspects of computer and network management.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1130 - Network Fundamentals
- CIS 2510 - Microsoft Windows Server Operating System
- CIS 2515 - Windows Network Infrastructure
- CIS 2520 - Windows Server Advanced Services
- CIS 2640 - Network Security

Network Engineering Associate, STC

## Description

This certificate program will provide the student with state-of-the-art networking skills taught via the Cisco Networking Academy curriculum. The curriculum includes all aspects for an introductory network engineering position. This program is designed to provide the knowledge and skills required to understand and participate in basic networking design, installation, configuration and troubleshooting corporate network infrastructure. Included in this program are networking theory, Open Systems Interconnection (OSI) model, networking media, physical and logical design, maintaining networking equipment, designing and implementing internet protocol schemas, the basics of all current internal routing protocols, beginning security information and safety.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as network security analyst, network architect and network engineer.

## Program Prerequisite(s)

- CIS 1107 - Introduction to Operating Systems


## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2416 - Routing \& Switching Essentials
- CIS 2421 - Scaling Networks
- CIS 2640 - Network Security


## Network Engineering Entry Level, STC

## Program Code: NEEA.S.STC • Credit Hours: 10

## Description

This certificate program will provide the student with networking skills taught via the Cisco Networking Academy curriculum. The Cisco Certified Entry Level Networking Technician (CCENT) designation validates the ability to install, operate and troubleshoot a small enterprise branch network including basic network security. With the CCENT, a networking professional demonstrates the skills required for entry level network support positions. The curriculum covers networking fundamentals, wide area network (WAN) technologies, basic security and wireless concepts, routing and switching fundamentals and configuring simple networks. The CCENT is the first step towards achieving the CCNA designation.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2416 - Routing \& Switching Essentials


## Network Engineering Security Associate, STC

## Description

This certificate will provide the student with state of the art network security skills taught using the Cisco Networking Academy curriculum. This program is designed to provide the knowledge and skills required to understand basic security threats and to configure and manage Cisco devices to provide appropriate network security. Cisco switches, routers, firewalls and Intrusion Prevention Systems (IPS) methods will be used.

## Career Opportunities

Security analysts plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. They may ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. They may also be involved in the response to computer security breaches and viruses.

## Program Requirements

- CIS 1107 - Introduction to Operating Systems
- CIS 1411 - Introduction to Networks
- CIS 2418 - Basic Firewall Security
- CIS 2416 - Routing \& Switching Essentials
- CIS 2640 - Network Security


## New Media, STC

## Program Code: NWMED.S.STC • Credit Hours: 17

## Description

The New Media Short-Term Certificate is designed to cultivate skills in mass communication and message design, visual communication, journalism and marketing within the realm of new technologies including blogs, podcasts, video games, video production, websites, and social media platforms such as Facebook, Instagram, YouTube and Twitter. Students will learn valuable marketing skills, hands on visual communication design, and effective message design in mass communication channels through interdisciplinary theory and methodology. Graduates of the certificate will be able to analyze and assess the needs of a client in order to most effectively communicate and engage with their respective publics.

## Career Opportunities

The New Media Certificate is built to add to the experience of students new to fields of marketing, communication, visual communication and journalism but is also beneficial to those that are currently working in the field and want to update their skill set to include new media techniques.

## Program Requirements

- COM 2201 - Introduction to Mass Communication
- COM 2270 - Communication Internship
- ENG 1101 - English Composition I
- JOU 2101 - Introduction to Journalism
- MRK 2135 - Digital Marketing
- VIS 1140 - Design Processes I


## Nurse Aide, STC

## Program Code: NAST.S.STC • Credit Hours: 4

## Description

Provides education to individuals in the basic skills necessary to provide personal care services and activities under the delegation and supervision of a registered or licensed practical nurse to residents in a long-term care facility.

Chapter 3701-19 of the OAC for the State of Ohio establishes the requirements for Ohio's Nurse Aide Training and Competency Evaluation program. These requirements mandate all NAs working on a regular basis in Ohio's LTCFs must complete an Ohio Department of Health-approved 75 -hour TCEP and pass a competency evaluation test conducted by the director.

## Career Opportunities

Individuals may work as Nurse Aides; Home Health Care Aides or Patient Care Assistants.

Program Requirements

- ALH 1120 - Nurse Aide Training


## Nutrition Associate, STC

## Program Code: NA.S.STC • Credit Hours: 4

## Description

Graduates of the certificate program create environments where moments of joy, independence, and wellness are promoted as they assist with preparation of food items and serves food to patients and residents within a scheduled time frame. The Nutrition Associate cleans and maintains food service areas, including kitchen and dining room, assists the Nutrition Director or Dietary Manager and/or cook in maintaining inventory and quality control. Maintains clean, neat and safe work environment. Assures that residents diets are followed. Maintains current sanitation audits and highest standards for kitchen cleanliness. Assists as a patient or resident assistant when all dietary duties are finished

## Career Opportunities

Career opportunities are abundant in both the Premier and Kettering Health hospital network organizations as well as area long-term care facilities. Nutrition Associates may also pursue employment opportunities in the public school system and correctional facilities.

- DIT 2101 - Dining Assistant Dietary Aide
- DIT 2510 - Institutional Food Safety \& Quantity Food Systems


## Ohio Peace Officer Basic Training Academy, STC

Program Code: BAS.S.STC • Credit Hours: 26

## Description

This program of study will provide you with the complete Ohio Peace Officer basic officer training required by the State of Ohio for new Ohio law enforcement officers. Taught by state-certified commanders and instructors, the basic academy adheres to the required content, instructional and training standards necessary for individuals to become certified peace officers in the State of Ohio. The basic academy consists of over 700 hours of instruction delivered in 24 weeks of training. The curriculum is intensive and participants must devote significant time and effort to complete the program. Academic, physical fitness, firearms and other demanding skill sets are included in the program. At the conclusion of the training, students are required to take a 200 -question written final exam administered by the Attorney General's Office to receive a certificate of completion. Graduates of this program typically seek employment as police officers, sheriff 's deputies, park rangers or other positions in Ohio which require a law enforcement commission. The Sinclair Academy has placed hundreds of graduates in more than 300 law enforcement agencies in Ohio. Entrance into Sinclair's Criminal Justice Training Academy is a competitive process and not all applicants are accepted. The academy is offered in both the Spring and Summer semesters.

## Career Opportunities

There are openings in local and state law enforcement agencies as well as private investigation and personal protection agencies.

## Program Prerequisite(s)

Physical fitness assessment, fingerprint check, oral interview and college level ready for English.

Program Requirements

- CJS 2280 - Basic Peace Officer Training I
- CJS 2281 - Basic Peace Officer Training II


## Ohio Real Estate Sales Associate, STC

## Program Code: RESS.S.STC • Credit Hours: 9

## Description

This certificate program is designed for the person who is interested in a career in real estate sales. The course work meets the educational requirement of 120 classroom hours for persons to sit for the Ohio real estate license exam: 40 hours of Real Estate Principles and Practices, 40 hours of Real Estate Law, 20 hours of Real Estate Finance, and 20 hours of Real Estate Appraisal. (Further state requirements must also be satisfied). Seat hour requirements of 120 hours are strictly enforced by
state rule. Successful completers will receive the Ohio Real Estate Sales Associate Certificate.

## Career Opportunities

The U.S. Bureau of Labor Statistics says "Employment of real estate brokers and sales agents is projected to grow 11 percent from 2012 to 2022, about as fast as the average for all occupations" (Occupational Outlook Handbook).

## Program Requirements

- RES 1101 - Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal


## Patient Access \& Scheduling Coordinator, STC

## Program Code: MOR.S.STC • Credit Hours: 14

## Description

This certificate prepares students for entry-level employment in the medical office environment performing scheduling, monitoring patient appointments, out-patient procedures, medical and office equipment maintenance, storing supplies and pharmaceuticals. The program is designed to develop knowledge and understanding of medical language and documentation.

## Career Opportunities

Options for those who complete the certificate include: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMOs), multi-physician group practices and medical specialty clinics.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ENG 1101 - English Composition I
- HIM 1101 - Medical Terminology
- MAS 1110 - Administrative Medical Assisting


## Patient Care Technician, STC

## Program Code: PCT.S.STC • Credit Hours: 7

## Description

The Patient Care Technician certificate prepares students to perform the basic skills necessary to provide personal care services and activities under the delegation and supervision of a registered or licensed practical nurse to patients within an acute care facility. Students will be
able to demonstrate basic nursing care and the skills required to promote health and healing for patient, as well as implement nursing care that decreases risks and follows safety procedures. Upon completion of ALH 1120 - Nurse Aide Training, students are eligible to sit for the State Test for Nurse Aide Training to become a State Tested Nurse Aide (STNA).

## Career Opportunities

Hospitals; Home Health Aide; Long-term Care Facilities; Rehabilitation Centers.

Program Requirements

- ALH 1120 - Nurse Aide Training
- ALH 1121 - Acute Care Nurse Aide


## Perioperative Nursing, STC

## Program Code: ORN.S.STC • Credit Hours: 4

## Description

This is an advanced certificate program designed to provide Registered Nurses (RN's), graduate nurses, and nursing students, an introduction to and experiential learning opportunities in perioperative nursing. Students will be exposed to the knowledge and skills required to provide safe, patient-centered care to patients having surgical intervention during the preoperative, intraoperative, and postoperative periods. Upon completion, students will be prepared for an entry-level operating room staff nurse position. Graduates are also eligible to join the Association of PeriOperative Nurses (AORN), and, following two years of operating room experience, may sit for the CNOR exam, an accredited credentialing exam for perioperative registered nurses.

## Career Opportunities

Upon completion, students will be prepared for an entry-level operating room staff nurse position. Graduates are also eligible to join the Association of PeriOperative Nurses (AORN), and, following two years of operating room experience, may sit for the CNOR exam, an accredited credentialing exam for perioperative registered nurses.

Program Requirements

- SUT 2600 - Fundamentals of Perioperative Nursing


## Pharmacy Technician, STC

## Program Code: PHT.S.STC • Credit Hours: 21-23

## Description

This program prepares individuals to perform the technical and specialized skills of a pharmacy technician within retail, mail-order, hospital, nursing homes and home health care settings. The program is designed to develop knowledge and understanding of basic pharmacology, maintenance of patient records, drug-product
preparation and distribution and record-keeping. A portion of this program will involve 80 hours of simulated lab and 210 hours of directed practice within a pharmacy. A state and federal background check will be required prior to starting the directed practice. A grade of " C " or better is required in all courses to complete the program. Upon completion of the program students may take the national Pharmacy Technician Certification Board Examination.

## Accreditation

The Pharmacy Technician Program is accredited by the American Society of Health-System Pharmacists/Accreditation Council for Pharmacy Education (ASHP/ACPE).

## Career Opportunities

Pharmacy Technician in retail and mail-order settings, hospital pharmacies, nursing homes and home health care sites.

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- ALH 1122 - Pharmacy Technician I
- ALH 1123 - Pharmacy Technician II
- ALH 1124 - Pharmacy Technician Directed Practice
- ALH 1183 - Pharmacy Technician Lab
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I OR
- BIO 1141 - Principles of Anatomy \& Physiology I
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1445 - Quantitative Reasoning OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.

Post Associate Certificate for Engineering University Transfer, STC

## Program Code: EUTPG.S.STC • Credit Hours: 16

## Description

The Post Associate Certificate for Engineering University Transfer is designed for students who would like to take additional coursework at Sinclair in preparation to transfer to a four-year university. A minimum of an associate degree is required. Courses used to fulfill the requirements of the AS degree in Engineering University Transfer cannot be used for this certificate. All students should meet with an academic advisor prior to enrolling in any courses within this certificate.

## Career Opportunities

This certificate is design to help students complete bridge courses before transferring to a four-year university.

## Transferability

All courses within the certificate have been selected for transfer to fouryear institutions.

## Prerequisites

- Students must have completed the Engineering University Transfer associate degree.


## Program Requirements

- Associate of Science Elective 16 Cr . $\mathrm{Hr}(\mathrm{s})$.


## Program Requirements

Choose 16 hours from:

- EET 1131 - Digital Electronics
- EET 1150 - DC Circuits
- EET 1155-AC Circuits
- EET 2201 - Electronic Devices \& Circuits
- EET 2259 - Programming for Electronics Technology
- EET 2261 - Microprocessors
- EGR 1101 - Introductory Mathematics for Engineering Applications
- EGR 2131 - Engineering Digital Design
- EGR 2201 - Circuit Analysis
- EGR 2261 - Engineering Problem Solving using "C" \& "C++"
- ENG 1201 - English Composition II
- HIS 1112 - Western Civilization II
- ISE 1100 - Product Development Fundamentals
- ISE 2208 - Engineering Technology Economics \& Cost Analysis
- MAT 1450 - Introductory Statistics
- MAT 2290 - Calculus \& Analytic Geometry III
- MAT 2310 - Elementary Differential Equations
- MAT 2320 - Linear Algebra
- MAT 2330 - Differential Equations \& Linear Algebra
- MAT 2570 - Discrete Mathematics
- MAT 2600 - Applied Statistics
- MEE 2101 - Statics for Engineers
- MEE 2201 - Thermodynamics for Engineers
- MEE 2301 - Strength of Materials for Engineers
- MEE 2401 - Dynamics for Engineers
- MET 1161 - Software Tools for Engineering Technology
- MET 2101 - Thermodynamics
- MET 2201 - Statics
- MET 2251 - Strength of Materials
- MET 2301 - Fluid Mechanics
- MET 2351 - Dynamics
- PHI 2205 - Introduction to Philosophy
- PHI 2206 - Introduction to Ethics
- PHY 2210 - MATLAB for Scientists \& Engineers
- REL 1111 - Eastern Religions
- REL 1112 - Western Religions

Post Associate Certificate in Interior Design, STC

## Program Code: INDPG.S.STC • Credit Hours: 11

## Description

The certificate will provide an introduction to REVIT, construction drawings, materials and application; and kitchen and bath designs to support additional academic requirements to gain eligibility to take the National Council for Interior Design Qualification (NCIDQ) exam.

## Career Opportunities

Students will gain professional status to pursue careers as designers or consultants in design studios, architecture firms or commercial retailers.

## Program Prerequisite(s)

## Minimum of an AAS degree in interior design

## Program Requirements

- CAT 1121 - Architectural Graphics II
- CAT 2741 - Current Topics in Architecture
- IND 2250 -3D Modeling
- IND 2280 - Kitchen \& Bath Design


## Powerplant Aviation Maintenance, STC

## Program Code: PPAM.S.STC • Credit Hours: 19

## Description

The Powerplant Aviation Maintenance certificate provides the knowledge and skills required by the Federal Aviation Administration (FAA) for the powerplant maintenance technician student. Students will learn to apply all the knowledge and skills in the lab portion.

## Career Opportunities

Boeing Commercial Aircraft Company recently predicted 1,000,000 more jobs in aviation in the next 15 years. Airbus of Europe has predicted about 800,000 more jobs in the next 15-20 years. Both predictions are based on anticipated growth in aircraft production and flying passengers. Many mechanics will reach retirement age in the next three years as a result of an interruption of current certificates issued by the FAA. More jet aircraft means more need for mechanics. The general aviation sector already has a shortage of certificated mechanics.

## Program Requirements

- AVT 1128 - Powerplant Safety Systems
- AVT 2122 - Ignition \& Starting
- AVT 2126 - Reciprocating Engines
- AVT 2129 - Propellers
- AVT 2138 - Engine Fuel \& Fuel Metering
- AVT 2219 - Turbine Engines


## Processes for Interior Design, STC

## Program Code: IND.S.STC • Credit Hours: 24

## Description

This certificate provides students with an introduction in the field of interior design. It will include the following introduction to the design process: problem solving techniques, space planning, production selection, ADA compliancy, ergonomics, lighting, color, furniture placement and accessorizing, scaled floor plan, elevation and detail drawings, defining/applying architectural and interior-related materials, estimating/budgeting products, writing specifications; and, presentation skills.

## Career Opportunities

This certificate can provide students an opportunity to support entry level interior design positions. Many opportunities exist in retail stores (paint, flooring, lighting, and furniture), home staging, visual merchandising and as an interior designer's assistant.

## Program Requirements

- CAT 1101 - Architectural Graphics I
- IND 1180 - History \& Theory of Interior Design
- IND 1230 - Residential Design
- IND 1234 - Materials \& Textiles
- IND 1240 - Color Theory
- IND 2130 - Non-Residential Design
- IND 2140 - Sustainable Design


## Professional Communication, STC

## Program Code: COM.S.STC • Credit Hours: 27

## Description

Communication skills are critically important for everyone. Earning a professional communication certificate can be an important key to career success. Completion of the certificate will demonstrate to current and prospective employers that a student recognizes the importance of various communication skills and strategies in a variety of professional settings. The results of a 2011 survey by the National Association of Colleges and Employers showed verbal communication skills as the number one soft skill that employers sought in new college graduates looking to join their organizations.

## Career Opportunities

A Professional Communication Certificate can provide opportunities in journalism, speech education, business, industry, government, broadcast media, law, ministry, social services, public relations, or provide valuable communication skills to enrich any career. Enhancing communication skills provides invaluable benefits for all students, regardless of major or career path.

## Program Requirements

- COM 2201 - Introduction to Mass Communication
- COM 2206 - Interpersonal Communication
- COM 2211 - Effective Public Speaking
- COM 2220 - Introduction to Communication Theory
- COM 2225 - Small Group Communication
- COM 2230 - Nonverbal Communication
- COM 2245 - Intercultural Communication
- COM 2235 - Principles of Interviewing OR
- COM 2287 - Effective Listening
- COM 2285 - Organizational Communication OR
- COM 2286 - Public Relations Principles


## Professional Firefighter, STC

## Program Code: PFC.S.STC • Credit Hours: 12

## Description

Provides training for full-time, part-time and volunteer firefighters to obtain the certifications necessary to meet the requirements of the National Fire Protection Association Standard 1001, Firefighter I and II. State of Ohio Certification from the Ohio Department of Public Safety and National Board on Fire Service Professional Qualifications.

## Accreditation

Fire Officer I and II are accredited by the National Board on Professional Firefighter Qualifications Board.

## Career Opportunities

Professional firefighter in the State of Ohio.

## Program Prerequisite(s)

## Must have a valid motor vehicle operator's license

## Program Requirements

- FST 1102 - Firefighter I AND
- FST 1103 - Firefighter II Transition AND
- FST 1442 - Emergency Vehicle Operator OR
- FST 1104 - Firefighter II AND
- FST 1442 - Emergency Vehicle Operator


## Professional Writing, STC

## Program Code: PRW.S.STC • Credit Hours: 18

## Description

The Professional Writing Certificate offers appropriate courses for students and professionals interested in improving their writing, editing and computer skills for a future in professional writing or to enhance their marketability. The certificate is especially useful for those in professional and administrative positions in business, hospitality, health and human services.

## Career Opportunities

The Professional Writing Short Term Certificate is a valuable addition to many, if not all, majors at Sinclair. Students completing this certificate will learn writing and communication techniques essential in the workplace. Top jobs for students earning this certificate are in the copywriting, marketing, finance, grant, hospitality, legal, technical, health and business fields. Current research indicates that employers seek candidates who have expertise in writing in a professional setting, and students completing this certificate will acquire a facility with writing and language use in that environment.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1220 - Word Processing Software
- ENG 1101 - English Composition I
- ENG 1131 - Business Writing
- ENG 1199-Textual Editing
- ENG 2257 - Creative Writing: Nonfiction OR
- JOU 2101 - Introduction to Journalism


## Public Service Support, STC

## Program Code: SWA.S.STC • Credit Hours: 24

## Description

The Public Service Support certificate is the first of three core certifications of the proposed Community \& Public Services Associate of Applied Science. Students learn how to provide assistance to Social Work and Social Service Professionals in the field. This certificate includes course work in the fields of sociology, psychology, social work, and human services and behavioral health and is designed to prepare students to work in the helping profession at an entry level position. This certificate prepares students to work with those in need to overcome difficulties and improve their lives. This certificate is especially pertinent to students who may have dealt with personal and family problems and want to use their experience knowledge and passion to help others avoid the mistakes they made, which lead them to prison.

## Career Opportunities

The Public Service Support certificate is employable at a number of social service agencies, in the role of a case aide or monitor. Job duties may include transportation, visitation monitoring, school enrollment, detention monitoring etc. A student who continues with their education can achieve their degree in the Community \& Public Service AAS or their AA degree in Social Work, with additional coursework.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- PSY 1100-General Psychology
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SOC 2130 - Sociology of Family Violence
- SWK 1206 - Introduction to Social Work
- OT36 Arts and Humanities $\mathbf{3}$ Cr. Hr.(s)


## Public Services Assistant, STC

## Program Code: SSA.S.STC • Credit Hours: 20-21

## Description

The Public Services Assistant certificate is designed to provide the tools needed for employment with human service agencies emphasizing the skills of: communication, critical analysis of social problems, mediation, and investigative techniques. The inclusion of Mental Health Technology 1130, Introduction to Addictive Illness, provides an opportunity for the student to secure a Chemical Dependency Certified Assistant Certificate after state mandated criteria is met.

## Career Opportunities

The Public Service Assistant certificate is designed to provide the tools needed for employment with human service agencies.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- CJS 2145 - Correctional Case Management OR
- MHT 2138 - Ethical Issues in the Helping Professions
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary OR

- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology
- CJS 1165 - Corrections OR
- SOC 2205 - Social Problems OR
- SOC 2130 - Sociology of Family Violence


## Radio Frequency Identification (RFID), STC

## Program Code: RFID.S.STC • Credit Hours: 6-7

## Description

This program is an introduction to the basics of Radio Frequency Identification (RFID) principles with a business or engineering technology orientation. Various RFID technologies, RFID project planning and implementation of basic business solutions or RFID hardware setup, maintenance and troubleshooting will be covered. Emphasis is on a team approach to management and technology aspects of design and implementation of a basic system.

## Career Opportunities

There is an ever-increasing use and adaptation of RFID technology in business, manufacturing and the defense industry.

Program Requirements

- EET 2257 - Radio Frequency Identification (RFID) Capstone
- MAN 1157 - Management Applications of Radio Frequency Identification Technology OR
- EET 2157 - Radio Frequency Identification (RFID) Technology
- MAN 1106 - Introduction to Radio Frequency Identification


## Re-Entry Preparation, STC

## Program Code: REP.S.STC • Credit Hours: 12

## Description

The Re-entry Preparation Certificate is a one semester certificate that provides students with the minimum tools needed to reintegrate back into society. This certificate will focus on developing entry level computer skills, interpersonal communication, and the creation of a personal portfolio highlighting the education and skills obtained during incarceration.

## Career Opportunities

Students will obtain the basic skills needed to reintegrate back into society. Career opportunities include entry level occupations in all fields of labor. In many cases, students have gained viable vocational skills while incarcerated but are unable to successfully re-enter society because they lack basic computer skills and are unable to effectively create a personal portfolio to highlight those skills. This certificate will focus on developing basic level computer skills, interpersonal communication and the creation of a personal portfolio highlighting the education and skills obtained during incarceration.

## Program Requirements

- BIS 1120 - Introduction to Software Applications OR
- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills
- CJS 2200 - Human Relations, Mediation \& Conflict Resolution
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary OR

- PSY 1100 - General Psychology OR
- SOC 1101 - Introduction to Sociology


## Real Estate Sales Professional, STC

Program Code: RESPROF.S.STC • Credit Hours: 18

## Description

This certificate is designed for the person who is interested in a career in real estate sales. The program includes the educational requirement for persons to sit for the Ohio real estate license exam: 40 hours of Real Estate Principles and Practices, 40 hours of Real Estate Law, 20 hours of Real Estate Finance, and 20 hours of Real Estate Appraisal. Students will also learn effective communication skills and how to use office applications.

## Career Opportunities

A career in real estate can be very rewarding. The U.S. Bureau of Labor Statistics says "Employment of real estate brokers and sales agents is projected to grow 7 percent from 2018 to 2028, about as fast as the average for all occupations" (Occupational Outlook Handbook). Additional careers include positions as title officers and examiners, property managers, and loan officers.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- RES 1101 - Real Estate Principles
- RES 1201 - Real Estate Law
- RES 1301 - Real Estate Finance
- RES 1401 - Real Estate Appraisal


## Reimbursement Analyst, STC

## Program Code: RMS.S.STC • Credit Hours: 19

## Description

The Reimbursement Analyst short-term certificate prepares students to work in a billing office for medical providers. The certificate will focus on preparing students to take the national certification examination to earn the credential Certified Medical Reimbursement Specialist (CMRS) offered by the American Medical Billing Association (AMBA). Students will be expected to complete a practicum experience to obtain this certificate, gaining work and hands-on medical billing skills.

## Career Opportunities

The Reimbursement Analyst short-term certificate prepares students to work in a billing office for medical providers. The certificate will focus on preparing students to take the national certification examination to earn the credential Certified Medical Reimbursement Specialist (CMRS) offered by the American Medical Billing Association (AMBA).

## Program Requirements

- ALH 1101 - Introduction to Healthcare Delivery
- BIO 1107 - Human Biology OR
- BIO 1121 - Human Anatomy \& Physiology I
- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- HIM 1101 - Medical Terminology
- HIM 1160 - Medical Office Coding Concepts
- MAS 1130 - Reimbursement Specialist Practicum
- MAS 2210 - Medical Billing Specialist
- MAT 1130 - Mathematics in Health Sciences


## Respiratory Care of the Newborn, STC

## Program Code: RCN.S.STC • Credit Hours: 4

## Description

Provides education to respiratory care practitioners to be oriented to neonatal respiratory care including history, fetal development, stabilization, evidence-based practices, and multi-disciplinary approaches. Includes respiratory devices employed for ongoing support of term and pre-term infants. Graduates will have a better knowledge of newborn resuscitation and stabilization. Student must be a licensed respiratory therapist.

## Career Opportunities

Graduates will have a better knowledge of respiratory care skills and pertinent information needed for newborn resuscitation and stabilization.

## Program Prerequisite(s)

## Approval of Department

Program Requirements

- RET 2301 - Respiratory Care of the Newborn I
- RET 2302 - Respiratory Care of the Newborn II
- RET 2303 - Respiratory Care of the Newborn III


## Retail Business, STC

## Program Code: RTB.S.STC • Credit Hours: 12

## Description

The Retail Business short-term certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to further build and develop their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

Individuals who complete this certificate will have gained further knowledge and skills that are crucial to being a successful supervisor.

This certificate is the second step in the Retail Management Certificate which is designed to give incumbent retail workers the knowledge and skills required to be eligible for a promotion or raise within their current organization.

## Program Requirements

- ACC 1100 - Survey of Accounting
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- MRK 2100 - Foundations of Marketing


## Retail Management, STC

## Program Code: RMC.S.STC • Credit Hours: 24

## Description

The Retail Management certificate is a business program where students learn the key skills needed for retail management success. The Retail Management certificate gives students more of the basic tools needed to be a successful supervisor or manager in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to further build and develop their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

The Retail Management Certificate program was created by experts in the industry to provide relevant knowledge and skills to their workforce. This program has successfully prepared nearly 2,000 graduates for management positions. Employees and employers benefit directly from the higher level of self-confidence and engagement displayed by graduates.

Recently recognized by the White House as part of the Upskill Initiative, the certificate is currently available in a variety of formats including face-to-face, on-line, and in a competency-based model.

The certificate program was established under the direction of the Western Association of Food Chains which includes many of today's leading retailers and wholesalers, and 7,500 + supermarkets. The program also has endorsement from leading organizations including Food Marketing Institute (FMI) and National Grocers Association (NGA). Most recently, the Retail Management Certificate has gained recognition from highly respected entities such as the ACT Foundation, and the U.S. Department of Labor.

## Program Requirements

- ACC 1100 - Survey of Accounting
- BIS 1120 - Introduction to Software Applications
- ENG 1131 - Business Writing
- MAN 2101 - Introduction to Supervision
- MAN 2140 - Human Resource Management
- MAN 2150 - Management \& Organizational Behavior
- MAN 2275 - Retail Management Capstone
- MRK 2100 - Foundations of Marketing


## Program Code: SRN.S.STC • Credit Hours: 1

## Description

This advanced short-term certificate is designed to provide Registered Nurses, who specialize in Perioperative Nursing, the opportunity to learn the technical skills required to perform in the role of the Scrub during surgical intervention. Students will be exposed to the knowledge and skills required to provide assistance to the surgeon performing surgical intervention during the intraoperative period.

## Career Opportunities

RN graduates of this short term certificate will be able to increase their role versatility in any facility in which surgical intervention takes place. Many students will already be employed in a surgical facility and completion will allow them to perform in the role of the Circulator or Scrub.

## Program Prerequisite(s)

Approval of Department

Program Requirements

- SUT 2500 - RN Scrub


## Small Business Management, STC

## Program Code: SBM.S.STC • Credit Hours: 18

## Description

This certificate prepares existing or potential entrepreneurs in a variety of small business functions.

## Career Opportunities

Students completing this certificate can expect to be prepared for a management role in an existing small business or begin their own small business.

## Program Requirements

- ACC 1100 - Survey of Accounting
- ENG 1131 - Business Writing
- ENT 2140 - Small Business Finance
- LAW 1101 - Business Law
- MAN 1107 - Foundations of Business
- MRK 2220 - Small Business Marketing


## Social Service, STC

Program Code: SOCS.S.STC • Credit Hours: 26

## Description

The Social Service Short-Term Certificate is designed to provide the tools needed for employees and volunteer leaders related to human service agencies and nonprofit organizations emphasizing the skills of: communication, critical analysis of social problems, investigative techniques, an understanding of the bureaucratic social and legal system serving the community and the role of the volunteer.

## Career Opportunities

This certificate enhances careers in sociology, social work, education, government, health care, public safety, human services, nonprofit organizations and related fields.

## Program Requirements

- COM 2206 - Interpersonal Communication
- ENG 1101 - English Composition I
- MHT 1130 - Fundamentals of Addiction Counseling CDCA

Preliminary

- MHT 2138 - Ethical Issues in the Helping Professions
- SOC 1101 - Introduction to Sociology
- SOC 1115 - Sociology of Marriage \& Family
- SWK 1206 - Introduction to Social Work
- SWK 1213 - Introduction to Social Welfare
- SWK 2207 - Anti-Oppressive Social Work


## Software Applications for the Professional, STC

## Program Code: SA.S.STC • Credit Hours: 18

## Description

This certificate provides office staff, managers, professionals and anyone interested in learning software applications and integration with the skills they need for their job. Students will have the opportunity to develop and refine their skills in a variety of current software used in today's work environments.

## Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small to large businesses and educational facilities, to name a few.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- BIS 1201 - Keyboarding \& Document Formatting
- BIS 1220 - Word Processing Software
- BIS 1230 - Spreadsheet Software
- BIS 1240 - Presentation Software
- BIS 1250 - Specialized Business Software Application
- BIS 1260 - Database Software


## Sports Nutrition Specialist, STC

## Program Code: SNS.S.STC • Credit Hours: 6

## Description

The sports nutrition specialist is equipped with the knowledge of evidence-based nutrition principles that include Dietary Guidelines for Americans, Dietary Reference Intakes, USDA Nutrition Guidelines, FDA Nutrition Guidelines, CDC Nutritional Guidelines, MyPlate, National Fruit \& Vegetable Consumption Coalition, and the Academy of Nutrition and Dietetics general nutrition guidelines and position papers. The sports nutrition specialist is trained to identify nutritionrelated acute and chronic illness as well as disordered eating practices that can then be referred to a nutrition professional. Knowledge of macronutrients and their relationship with exercise and performance are provided. Ergogenic aids, supplements, and fad diets are reviewed for efficacy. The sports nutrition specialist certificate, in conjunction with an accredited personal training credential provides the nutrition knowledge for the trainer to provide general evidence-based nutrition principles to a healthy population as it applies to exercise and performance.

## Career Opportunities

The Sports Nutrition Specialist certificate will provide a sports nutrition skill set that can be utilized in the Personal Training and Health Coaching workforce.

## Program Requirements

- DIT 1525 - Human Nutrition
- DIT 1825 - Nutrition for Exercise \& Sport Science


## Supervision Foundations, STC

## Program Code: SFD.S.STC • Credit Hours: 9

## Description

The Supervision Foundations short-term certificate gives students the basic tools needed to be a successful supervisor in any business or industry, including retail, hospitality, healthcare, manufacturing and service industries. This certificate enables students to begin building their skills toolbox that will enable them to be successful in the workplace.

## Career Opportunities

Students completing this short-term certificate can continue with the Retail Management certificate program and be positioned for a promotion or raise in their current position.

## Program Requirements

- BIS 1120 - Introduction to Software Applications
- ENG 1131 - Business Writing OR
- MAN 2150 - Management \& Organizational Behavior


## Supervisory Skills, STC

## Program Code: BSP.S.STC • Credit Hours: 21

## Description

The Supervisory Skills certificate is useful to students who need to understand the foundation of supervision, no matter in which discipline they formally study. Engineers, business managers, architects, educators, and many other professionals need to understand how to better supervise employees. This certificate includes coursework that is foundational to understanding business and personnel concepts that will benefit supervisors in any capacity. This certificate is most useful for those who are new to supervision or to those who desire to become supervisors.

## Program Requirements

- ACC 1100 - Survey of Accounting OR
- ACC 1210 - Introduction to Financial Accounting
- COM 2211 - Effective Public Speaking OR
- COM 2225 - Small Group Communication
- ECO 1100 - Introduction to Economics OR
- ECO 2160 - Principles of Macroeconomics OR
- ECO 2180 - Principles of Microeconomics
- LAW 1101 - Business Law
- MAN 2101 - Introduction to Supervision
- MAN 2150 - Management \& Organizational Behavior
- MRK 2101 - Principles of Marketing Management


## Surgical Instrument Technician, STC

## Program Code: SPT.S.STC•Credit Hours: 13

## Description

The Surgical Instrument Technician short-term certificate program will prepare the graduate to work within a health-care facility to ensure medical and surgical supplies, instruments, and equipment are properly cleaned, prepared, processed, stored, and distributed for patient care and surgical use. Knowledge of basic human anatomy, medical terminology, and a combination of sterilization, inventory control, and information technologies are integrated into the curriculum to ensure a safe outcome for all patients. This program combines both lecture, lab, and a practicum to prepare the Sterile Processing Technician student to take the CRCST Exam upon graduation and upon completion of 400 work related hours in a Sterile Processing Department. Hours attained during practicum count as credit toward the 400 work related hours required for CRCST Exam eligibility. Note: For students under age 18 there may be restrictions on participating in certain Health Sciences programs. Any student under age 18 must contact the program director/department chair to discuss whether he or she may enroll. A grade of C or higher is required in all courses.

- ALH 1101 - Introduction to Healthcare Delivery
- HIM 1101 - Medical Terminology
- SUT 1100 - Sterile Processing I
- SUT 1200 - Sterile Processing II
- SUT 1207 - Practicum for Sterile Processing II


## Tartan TOPS Program, STC

## Program Code: CTP.S.STC • Credit Hours: 25

## Description

The Tartan TOPS Program (Transition Options in Postsecondary Education) provides and educational/career pathway for students aged 18-24 who have an intellectual disability. This certificate program is a meaningful, academic credential that provides students with the necessary educational supports to learn life and work skills at the postsecondary level. The program uses embedded tutors in inclusive academic classes and provides students with internship opportunities in inclusive work and class-based settings While the first two semesters equip students with the academic skills needed to succeed in a postsecondary environment (including socially), the last two semesters provide the training and employment resources needed for students to become self-sufficient in the workplace and obtain competitive employment. Sinclair is committed to the values of community inclusion and self-determination and promotes the pursuit of postsecondary options that include academic enrichment, competitive employment, social engagement, and independent living for individuals with intellectual disabilities.

## Program Requirements

- COM 2206 - Interpersonal Communication
- SCC 1100 - Life Skills I
- SCC 1200 - Life Skills II
- SCC 1300 - Work Skills I
- SCC 1400 - Work Skills II
- SCC 2100 - Inclusive Internship

Any Course in Catalog $\mathbf{3}$ Cr. Hr.(s)

## Tax Practitioner, STC

## Program Code: TAXP.S.STC • Credit Hours: 15

## Description

The Tax Practitioner certificate prepares students for work in the tax preparation field. As tax law changes and grows more complex, more people seek professional tax preparation assistance. The Tax Practitioner certificate covers federal, state and local tax law. The Tax Practitioner certificate will prepare students for the Registered Tax Preparer Exam that the Internal Revenue Service is instituted with the 2012 tax season.

## Career Opportunities

Tax preparers may work as employees for companies or work as an independent tax preparer.

## Program Requirements

- ACC 1210 - Introduction to Financial Accounting
- ACC 1220 - Introduction to Managerial Accounting
- ACC 1510 - Computerized Accounting Systems
- ACC 2321 - Federal Taxation
- ACC 2322 - Advanced Taxation


## Tissue Banking Technology, STC

## Program Code: TBT.S.STC • Credit Hours: 12

## Description

The Tissue Banking Technology certificate program prepares individuals to attain the skills necessary to become a certified tissue banking technologist. Tissue banking technologists are integral in the recovery, processing, storage and distribution of human tissue. Students in this program will gain basic knowledge of human anatomy, medical terminology, sterile techniques, surgical recovery and processing techniques, and all ethical and regulatory standards related to the field of Tissue Banking.

## Career Opportunities

Careers in Tissue Banking Technology are growing both locally and nationally, as interest in new graft technology continues to rise. Locally, CBCCTS has expanded its operations and opened a new processing facility that will increase current processing capacity by 40\%.

## Program Prerequisite(s)

## Restricted to Majors

## Program Requirements

- BIO 1107 - Human Biology
- MAT 1130 - Mathematics in Health Sciences OR
- MAT 1110 - Math for Technologists
- SUT 1101 - Tissue Banking I
- SUT 1107 - Lab for Tissue Banking I
- SUT 2101 - Tissue Banking II
- SUT 2107 - Practicum for Tissue Banking II


## Trauma Informed Care in Education, STC

## Program Code: EDU.S.STC • Credit Hours: 12

## Description

Trauma Informed Care in Education is a four-course certificate that provides students a foundational understanding of trauma effects on the
brain, culturally sensitive approaches, and resources to equip educators in a trauma-informed classroom.

## Career Opportunities

This certificate will provide an overview of how adverse childhood experiences impact child development, social emotional development, and how early childhood trauma impacts brain development. The content of the courses in this certificate will aid teachers in preschool through grade 12 in assessing and addressing the needs of children who have experienced trauma and will provide strategies to develop a trauma-sensitive classroom environment. Additionally, the certificate will examine historical and current racial, ethnic, gender, sexual orientation, linguistic, and social class stereotypes and biases as related to youth in the United States and globally.

## Program Requirements

- EDU 2101 - Introduction to Early Childhood Trauma
- EDU 2102 - Understanding the Brain \& Trauma
- EDU 2103 - Trauma-Informed Classrooms
- SOC 2210 - Cultural Humility for Working with Youth


## UAS First Responders, STC

## Program Code: UASFR.S.STC • Credit Hours: 16

## Description

The UAS First Responders Short-Term Technical certificate prepares students for entry level positions in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge, skills and proficiency in UAS theory, capabilities and scenario based objectives related to the first responder industry.

## Career Opportunities

The demand for Unmanned Aerial Systems is increasing at a phenomenal rate. A shift in military strategies and the demand for use in the private sector as well as other government agencies has fueled an industry which is estimated to explode to over $\$ 80$ billion in the next decade. With local government agencies and First Responder personnel in need of new technological options for fast and safe mission execution. The Dayton region and its Educational Institutions are primed to take advantage of the opportunity as industry leaders.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1108 - UAS First Responder Applications
- AVT 2150 - Crew Resource Management for UAS
- CJS 1101 - Introduction to Criminal Justice Science
- CJS 1155 - Homeland Security Issues \& Administration
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- EMS 1100 - Emergency Medical Responder Lecture \& Laboratory


## UAS for Geographic Information Systems, STC

## Program Code: UASGIS.S.STC • Credit Hours: 16

## Description

The UAS for GIS (Geographic Information Systems) Short-Term Technical certificate prepares students for entry level positions as GIS analysts in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge and skills involving GIS technologies and UAS technology.

## Career Opportunities

The Unmanned Aerial System platform capabilities include but are not limited to aerial mapping and remote sensing for geographic information systems. The private sector as well as governmental demands for Unmanned Aerial System personnel in geospatial information and remote sensing applications are in high demand.

## Program Requirements

- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1114 - Geospatial Information for UAS
- AVT 2150 - Crew Resource Management for UAS
- CAT 1501 - Fundamentals of Surveying \& Mapping
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization
- GEO 1107 - Introduction to Geographic Information Systems (GIS)


## UAS Precision Agriculture, STC

## Program Code: UASAG.S.STC • Credit Hours: 16

## Description

The UAS Precision Agriculture Short-Term Technical Certificate prepares students for entry level positions in the Unmanned Aerial Systems (UAS) industry by providing foundational knowledge and skills involving Precision Agriculture and UAS Technology.

## Career Opportunities

Precision Agriculture is expected to be $80 \%$ of the UAS market over the next decade. Industry projections and demands indicate that the UAS precision agriculture market will be one of the five industries that benefit first from FAA rules and regulation changes. With agriculture being the number one industry in the state of Ohio and contributing 107 billion dollars a year to the Ohio economy. Agricultural industry needs in drought management, disease detection, watering, and spraying pesticides make UAS an intelligent and affordable option.

## Program Requirements

- AGR 1160 - Introduction to Agriculture Science
- AGR 1200 - Agricultural Economics
- AGR 1300 - Agronomy
- AVT 1101 - Introduction to Unmanned Aerial Systems
- AVT 1104 - UAS Standards, Regulations \& Law
- AVT 1112 - UAS Precision Agriculture
- AVT 2150 - Crew Resource Management for UAS
- EET 1121 - UAS Remote Sensing \& Analysis
- EET 1158 - Aerospace Spatial Visualization


## Veterinary Assistant, STC

## Program Code: VET.S.STC Credit Hours: 19

## Description

This certificate program will prepare the student to work within the veterinary hospital, assisting the veterinary technician (nurse) and veterinarian (doctor) with animal care by learning and practicing professionalism, client service, animal behavior and restraint, medical assisting, laboratory protocols and collection and preparation of samples, surgical suite care and preparation of animals, and anesthetic monitoring for the stable patient. Students will be offered the opportunity to become Fear Free (R) certified during this program. This certificate will focus on the care of small animals (dogs and cats), but students interested in large animal or exotic animal care may be able to be placed in a suitable clinic in which to gain that experience.

## Career Opportunities

A Veterinary Assistant is a vital member of the medical/patient-care team in a veterinary hospital. Veterinary Assistants do not need to be certified in the state of Ohio in order to work in a veterinary practice, but this program is designed to create a professional, well-trained, experienced employee who will be able to fit into a variety of practices. The veterinary profession lacks sufficient paraprofessionals in this region, the state of Ohio, and the nation - additional trained staff can help to alleviate the stress on current workers. Veterinary assistants are also valuable in other animal-related fields, such as kennel-worker, groom, animal trainer, and animal care-giver (petsitter).

## Program Requirements

- COM 2206 - Interpersonal Communication OR
- COM 2211 - Effective Public Speaking
- ENG 1101 - English Composition I
- MAT 1130 - Mathematics in Health Sciences OR
- OT36 Mathematics Elective $\mathbf{3 ~ C r} . \mathbf{H r}(\mathbf{s})$.
- PSY 1100 - General Psychology
- VET 1102 - Introduction to Veterinary Technology I
- VET 1202 - Introduction to Veterinary Technology II
- VET 1205 - Clinical Practice I: Hospital Practices \& Professionalism
- VET 2107 - Technical Practicum I OR
- VET 2108 - Veterinary Assistant Technical Practicum


## Video Production, STC

## Program Code: VID.S.STC • Credit Hours: 22

## Description

This certificate introduces students to the basics of video production, including lighting \& cinematography and audio production. Students will learn the design process, appropriate applications and video and audio equipment to create quality videos.

## Career Opportunities

There are several positions to fill in the digital video production profession. You could work in television, advertising, or news reporting. You also could apply your skills in education, government, or business industries. Within these settings, you could hold entry-level positions in a variety of positions, such as a video editor, camera operator, audio editor, or live stream operator. As well, there are freelance opportunities.

## Program Requirements

- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1410 - History \& Theory of Video Production
- VIS 1420 - Video Production
- VIS 1430 - Lighting \& Cinematography
- VIS 1440 - Sound Design


## Web Design, STC

## Program Code: WEB.S.STC•Credit Hours: 21

## Description

This short-term certificate introduces students to the basics of web coding and design, including conceptualizing, designing, developing, and maintaining websites. Students will learn a variety of web design concepts and digital design applications.

## Career Opportunities

Students successfully completing this short-term certificate will have the necessary skills to apply for entry level work in the field of web design and development for businesses, government and design agencies.

## Program Requirements

- CIS 1350 - Web Site Development with HTML \& CSS
- VIS 1100 - Design Foundations
- VIS 1140 - Design Processes I
- VIS 1310 - History \& Theory of Web Design
- VIS 1320 - User Experience/User Interface
- VIS 1330 - Web Design


## Web Programming, STC

## Program Code: WW1.S.STC • Credit Hours: 18

## Description

The Web Programming certificate is designed to provide an individual with current web development skills. It focuses on techniques for developing web-based distributed applications using standard languages and protocols such as HTML, JavaScript, CSS, XML, PHP and ASP.NET. It is designed for experienced software developers to update their skills and for individuals wishing to make a career change into the Information Technology field. The certificate focuses on web application development in a client/server networked environment.

## Career Opportunities

Employment opportunities in IT include entry-level positions such as software developers, web developers, help desk analysts, network administrators, user support specialists, network security analysts and network engineers.

## Program Requirements

- CIS 1111 - Introduction to Problem Solving \& Computer

Programming

- CIS 1350 - Web Site Development with HTML \& CSS
- CIS 2165 - Database Management
- CIS 2212 - Java Software Development I
- CIS 2222 - ASP.NET with C\#
- CIS 2250 - Web Site Development with php


## Welding and Metal Joining, STC

## Program Code: CAMWM.S.STC • Credit Hours: 18

## Description

This certificate in welding and metal joining contains in-depth handson labs which will include MIG, TIG, Stick (ARC), and Ox-acetylene use along with other types of metal joining options and instruction to include sheet metal layout, shearing, bending, riveting, brazing and spot welding. Welding safety, personal protection equipment, and special welding tools will be taught in-depth and used by the students within the lab setting. The other courses within the certificate offer an introduction to the manufacturing processes used in the tooling, machining, the welding industry, a focus on blueprint reading, design using AutoCAD, various measurement techniques and the mathematics necessary to solve applications in welding and manufacturing technology.

## Career Opportunities

This in-depth training will ready students for entry level positions in Machine repair, Die and Mold repair, Metal Fabrication, Tool and Die shops, general repair shops and general manufacturing.

## Program Requirements

- CAM 1107 - Introduction to Mechanical Drafting with CAD
- CAM 1109 - Fundamentals of Tooling \& Machining
- CAM 1180 - Welding \& Metal Joining I
- CAM 1181 - Welding \& Metal Joining II
- ISE 1300 - Fundamentals of Dimensional Metrology


## Workforce Readiness, STC

## Program Code: WFR.S.STC • Credit Hours: 6

## Description

The Workforce Readiness certificate will provide students skills to help returning citizens overcome reentry and employment barriers.

## Career Opportunities

This certificate will start students on the path of workforce readiness.

## Program Requirements

- BIS 1400 - Customer Service
- CJS 1106 - Transition Skills


## Course Descriptions

This portion of the catalog provides information about the courses offered at Sinclair Community College. A brief description of each course is provided. For details regarding the additional information included with each course, see below.

## Course Numbering

Each section begins with a subject followed by a three letter prefix which identifies the subject area of the course. The number identifies the level. Courses that begin with a zero are developmental in nature. Credits earned in developmental courses will not apply to the overall program hours. Courses in the 1000 series are usually considered firstyear courses, courses in the 2000 series are usually considered secondyear courses, courses in the 3000 series are considered third-year courses, while courses in the 4000 series are considered fourth-year courses.

## Credit Hours

The number of semester credits for each course is indicated after the course title. Note that the number of credits for a course does not necessarily equal the number of hours that the course meets in one week. The actual number of hours per week varies by modality and will be reflected in the course schedule.

## Prerequisites

Prerequisites, if any, are listed at the end of each course description in italics. Prerequisites are established by each department to ensure that the student has an adequate and sufficient background to enroll in the course and achieve success in that course. If there are no prerequisites listed, none are required for the course.

## Co-requisites

Sometimes courses must be taken concurrently. If this is the case the courses are designated as co-requisites. For example, a biology lecture course and its associated lab course must be taken simultaneously. Lab information is usually noted. Co-requisites, if any, are listed at the end of the course description in italics.

## Repeatable

An " $R$ " indicates the course may be repeated for additional credit. These courses will be counted in the cumulative GPA each time the course is taken.

## NOTE: Courses described in this catalog are those approved by

 Sinclair Community College at the time of publication. Inclusion of a course description does not obligate the College to offer the course in any given semester or academic year.
## Policies \& Procedures

-     - Fraudulent Identification Policy
-     - The purpose of these policies and procedures is to help students succeed at Sinclair. Please carefully review and address any questions to instructors or the contacts provided.

The college reserves the right to appeal, change, or amend rules, regulations, tuition, and fees and may withdraw, add to, or modify the policies, courses, and programs listed herein.

## For current information:

- (937) 512-3000
- (800) 315-3000
- catalog.sinclair.edu


## Academic Petition Process

If you experienced an emergency situation which affected your ability to withdraw before the deadline date or your ability to finish course requirements, you may ask the Academic Petitions Committee to consider your circumstances. You must file a petition through the Office of the Assistant Provost as soon as possible, but no later than two years following the term when the grade was recorded. Please note that this process can only be used to change a grade of F or Z to a grade of W.

Examples of emergency situations which might support your petition are:

- Death of a close family member
- Unanticipated out-of-town assignment by employer
- Incarceration
- Other emergencies*

With your petition, you must submit documentation of your circumstances that prevented you from withdrawing before the deadline and/or impacted your ability to attend class and complete coursework. Documentation from your physician, employer, agency, etc. must be on letterhead and contain the dates pertaining to your situation to verify your inability to withdraw or attend class.

Once a petition is submitted, it is logged in and placed on the agenda for the next Academic Petition Committee meeting. This cycle can take
up to three months to complete. Additionally, the committee does not meet during the summer months.

The results of the Committee's petition decision, whether granted or denied, will be communicated to you by a letter sent to the address on the petition you submit.

The online Academic Petition form can be accessed at www.sinclair.edu/medical-health-withdrawal

If you are interested in filing a Tuition Refund Appeal, a separate process must be initiated through the Bursar's office. You may contact the Bursar's office directly at 937-512-2568.

For any issues that may fall under the Sexual Harassment and Sexual Misconduct policy resulting in students requiring resources, contact the Title IX office at (937) 512-2961 or at TitleIX@sinclair.edu
*For other medical or mental health emergencies see the Mental/Medical Health Withdrawal policy prior to contacting academic petitions.

## Adding/Dropping Courses

Before adding or withdrawing from one or more classes, students should consult an academic advisor and the Welcome Center if using financial aid. The financial aid status of any student may be affected by withdrawing from one or more classes. Current or returning students must have a 2.0 cumulative grade point average to add or drop a course online.

A student who registers for 12 or more credit hours is considered fulltime. A student who registers for 11 credit hours or less is considered part-time. Students may withdraw online, in person, or by phone.

- To withdraw from a full term course:
- Withdraw during the first eight (8) calendar days of the term for $100 \%$ tuition refund and no record of the class on the transcript.
- Withdrawal later than the first eight (8) calendar days, but prior to the Friday of the thirteenth week of the fall and spring term; and prior to the Friday of the tenth week of the summer term, results in no refund and a grade of " W " on the permanent record.
- Courses that are not full term in length have special deadlines.

Students should check their term statement or the Registration Calendar at: www.sinclair.edu/registration-calendar

- In order to complete the Add/Drop/Withdrawal in-person visit the

Welcome Center, Dayton Campus, or any regional center.

- Withdraw online through my.sinclair.edu or regportal.sinclair.edu
- To drop or withdraw from all classes for the term, students may also contact the Welcome Center, (937) 512-3000, 1-800-315-3000.
- A copy of the processed Withdrawal will be mailed to the student. This is proof of withdrawal and should be kept for the student's records. Failure to follow one of these processes means the student will receive a grade, usually an $\mathrm{F} / \mathrm{Z}$, in the class.
Note to Veterans:
- Veteran education benefits will be affected by withdrawal from one or more classes.
- Veterans should first contact the Military Family Education Center (formerly Veteran Services) in person at the Dayton Campus, Building 10, Room 10444 or via email at: mfec@sinclair.edu

For information on Financial Aid Add/ Drop Census Date Policy, see Financial Aid \& Scholarships.

## Administrative Withdrawal

Students may be administratively withdrawn from a class by their faculty member for nonattendance. Faculty must advise students in writing at the first class meeting what attendance record would constitute cause for administrative withdrawal. If a student does not attend the first class, it is the student's responsibility to obtain a copy of all materials distributed at the first class meeting.

Students may also be administratively withdrawn from classes as a result of a student conduct hearing with either a hearing officer or the Student Conduct Hearing Panel. Administrative withdrawals may be made when it has been determined that the student's presence on campus is potentially detrimental to the college, faculty, staff, students or themselves.

## Associate Degree

To be an associate degree candidate, a student must:

- Fulfill requirements of the degree program and the institution.*
- Complete a minimum of 60 semester hours.**
- Maintain a cumulative grade point average of at least 2.0 either overall or within their program of study.
*Generally, a student meeting all associate degree requirements in effect at the time they begin their coursework for a degree program will qualify for graduation. However, if the course of study is prolonged beyond six years after beginning, a student is required to consult academic advising to work with the appropriate department chairperson to determine graduation requirements. If a student has been enrolled continuously at Sinclair College for more than six years, and the degree program has not significantly changed, the student may request approval to graduate under their initial catalog requirements.
**Generally, the requisite 60 semester hours must be earned at Sinclair College or through other arrangements with other regionally accredited institutions or contractual relationships approved by the Higher Learning Commission (HLC). Additionally, unless a higher number of semester hours are specified by individual academic programs, students earning an associate degree from Sinclair College must earn a minimum of 15 semester hours of their academic program from Sinclair College. Programs requiring additional hours of residency (for accreditation, licensure, etc.) will provide an explanation or justification for any variations of the minimum credit hour requirements in their program literature and college catalog.

To earn more than one associate degree at Sinclair College, a student must take a minimum of 12 credit hours in one associate degree program that are different from another associate degree program, and a minimum of 24 credit hours in one bachelor degree program that are different from another bachelor degree program. If a student qualifies for more than one degree during the same semester using the same curriculum and does not take the minimum hours difference, the student may choose the degree to be awarded.

For more information about degree related policies mandated by the Higher Learning Commission (HLC), see
https://www.hlcommission.org/Policies/assumed-practices.html

## Attendance

Students are expected to be present at all class sessions. It is the student's responsibility to read and understand the class attendance policy or the Sinclair Online course participation policy that will be defined in the syllabus for each course. It is the faculty member's responsibility to define attendance or participation requirements and to monitor and record the students' fulfillment of these requirements. It is a program's prerogative to have specific policies across multiple sections due to the unique requirements of that program. Attendance for traditional classes or participation for Sinclair Online classes may affect final grades, financial aid eligibility, and VA Education Benefits. This policy differs from the "Financial Aid Student Attendance Policy", which may be found under Financial Aid \& Scholarships .

## Auditing a Course

To audit a course means:

- Students may attend class
- Students are not required to take exams
- Students do not receive a grade or credit

To register for a class to be audited:

- Registration in audit status will be accepted only during designated late registration periods and before the first meeting of a class. Registration can only be done in person at the Dayton Campus Welcome Center (First Floor, Building 10) or at any of the regional centers. Check www.sinclair.edu/registration-calendar for deadlines.
- The fee for auditing is the same as that for enrolling for credit. VA Educational Benefits may not be used to audit a course. In addition, financial aid may not be used to pay for courses that are audited.
Note: Audit status cannot be changed to credit status, nor can credit status be changed to audit status once registration has been completed.


## Assessment Policy

Prior to initial registration, students designating themselves as degree or certificate-seeking must be assessed for writing ability and numerical skills. Transfer students who are degree or certificate-seeking and who do not have transferable equivalent math or English courses must be assessed. Students may be exempt from assessment by providing proof of a qualifying college entrance exam score or a qualifying high school transcript. No degree or certificate seeking students can register for credit-bearing courses until they have test scores or other qualifying measures on file.

All students taking a mathematics or English course must be assessed through Sinclair College prior to enrollment.

Exceptions include:

- Qualifying entrance exam scores.
- Qualifying high school transcripts.
- Qualifying ACT/SAT scores.
- Prior Learning Assessment.
- Transferring credits for appropriate level math and English courses. For more information on specifics related to the above assessment, contact an academic advisor.

Students must begin mathematics and/or English course sequences no higher than the level indicated by their assessment results.

Students taking classes with prerequisites must meet them, either by assessment, transfer credit, or a qualified prior learning assessment option. Students requiring testing accommodations should make arrangements with the department of Accessibility Services. English as a second language (ESL) students should meet with the ESL coordinator prior to assessment to determine the appropriate assessment steps. International students must meet with the International Education department prior to assessment to determine eligibility and appropriate assessment steps.

Students taking non-prerequisite courses for personal interest or career development and not pursuing a degree or certificate are exempt from assessment.

## Baccalaureate Degree

To be a baccalaureate degree candidate, a student must:

- Fulfill requirements of the degree program and the institution.*
- Complete a minimum of 120 semester hours.**
- Maintain a cumulative grade point average of at least 2.0 either overall or within their program of study.
*Generally, a student meeting all baccalaureate degree requirements in effect at the time they begin their coursework for a degree program will qualify for graduation. However, if the course of study is prolonged beyond eight years after beginning, a student is required to consult academic advising to work with the appropriate department chairperson to determine graduation requirements. If a student has been enrolled continuously at Sinclair College for more than eight years, and the degree program has not significantly changed, the student may request approval to graduate under their initial catalog requirements.
**Generally, the requisite 120 semester hours must be earned at Sinclair College or through other arrangements with other regionally accredited institutions or contractual relationships approved by the Higher Learning Commission (HLC). Additionally, unless a higher number of semester hours are specified by individual academic programs, students earning a baccalaureate degree from Sinclair College must earn a minimum of 30 semester hours of their academic program from Sinclair College. Programs requiring additional hours of residency (for accreditation, licensure, etc.) will provide an explanation or justification for any variations of the minimum credit hour requirements in their program literature and college catalog.

To earn more than one baccalaureate degree at Sinclair College, a student must take a minimum of 24 credit hours in the second program that are different than the first. If a student qualifies for more than one degree during the same semester using the same curriculum and does not take the minimum credit hour difference, the student may choose the degree to be awarded.

For more information about degree related policies mandated by the Higher Learning Commission (HLC), see
https://www.hlcommission.org/Policies/assumed-practices.html

## Certificate Programs

Certificate programs recognized by the Ohio Department of Higher Education require completion of a minimum of 30 semester hours of a specific curriculum with a grade point average of at least 2.0 either overall or within the program of study. To qualify for a Certificate of Completion, students must complete at least 9 credit hours of Sinclair course work within the area of study to fulfill the institutions requirements.

To qualify as a certificate candidate (30-37 credit hours), a student must:

- Fulfill requirements of the certificate program and the institution.*
- Complete a minimum of 30 semester hours. **
- Maintain a cumulative grade point average (GPA) requirements by either:
- Maintaining a cumulative GPA of at least 2.0 or
- Maintaining a GPA of at least 2.0 within their program of study.
*Generally, a student meeting all certificate requirements in effect at the time they began their coursework for an academic program will qualify for a credential.
**Generally, the requisite semester hours must be earned at Sinclair College or through other arrangements with other regionally accredited institutions or contractual relationships approved by the Higher Learning Commission (HLC). To qualify for a certificate of completion, students must complete at least 9 credit hours of Sinclair coursework within the area of study to fulfill the institution's requirements.

For more information about degree related policies mandated by the Ohio Department of Higher Education (ODHE), visit:
https://www.ohiohighered.org/certificates-and-credentials

## Changing an Academic Program

A student is permitted to select only one active program of study. To change from one academic program to another, a student should meet with an academic advisor, academic coach, or faculty advisor. The advisor will make the change, end other programs that are no longer being pursued, and ensure the student fully understands any implications or consequences that may occur as a result of such changes. Students may also initiate this process online by emailing academicadvising@sinclair.edu.

Any change in academic program will be indicated on the student record and will not affect the cumulative grade point average.

## Changing Sections of a Course

Students may request to change to any open section of the same course until the last day to drop the course with a "W." Acceptable reasons for changing sections may include class conflict with work schedule, childcare, transportation, or health issues.

To change to a different course section, the student must:

- First, discuss their situation with the instructor teaching the course section in which the student is currently enrolled to determine if accommodations can be made.
- Speak with the appropriate department chair for assistance with changing course sections, if the instructor does not believe a reasonable accommodation can be made.
- Present a letter from their employer verifying a work schedule
change, or other official documentation regarding qualifying reasons, to the appropriate academic department chair for approval.
If the change is approved, the student will forward the email, with the department chair's signature, to the office of registration at registration@sinclair.edu.


## Children in Classes

Children (and others who are not officially enrolled) are not permitted in classrooms or laboratories when classes are in session. Additionally, children cannot be left unattended on campus at any time.

## Degree Audit (or Program Evaluation)

The degree audit (or program evaluation) is a tool that indicates students' progress toward the completion of a program of study, degrees and certificates. Students request a degree audit from an academic advisor/coach to determine which requirements they have completed and which requirements are remaining for a specific academic program. If they change academic programs, students will have a new degree audit for their new program. Students can run a degree audit for their declared major, or any other Sinclair major, in the Sinclair portal (my.sinclair.edu).

## Equal Opportunity/Non-Discrimination Policy

Policy Statement: Sinclair Community College is strongly committed to a policy of equal opportunity in its employment practices, educational programs and activities, and the many services it offers to the community. The college does not discriminate against applicants, employees, or students on the basis of race, color, creed, religion, age, sex, sexual orientation, gender identity, marital status, veteran status, national origin, ancestry, citizenship or disability.

Scope: This policy applies to all employees, students, contractors and other designated affiliates of Sinclair Community College. Notice of this policy shall be posted and provided as required by law.

Provisions: This policy statement shall be used as the official statement on non-discrimination whenever such a non-discrimination policy statement is required. Additionally, employment advertising for Sinclair Community College shall include the phrase: "an equal opportunity employer."

Responsibility: Inquiries and complaints concerning this policy should be referred to the Equal Opportunity Officer who coordinates Title VI (discrimination on the basis of race, color or national origin); Title IX (discrimination on the basis of sex); ADA (as amended) and Section 504 (discrimination on the basis of disability) and ADEA (discrimination on the basis of age).

Equal Opportunity Officer - Human Resources Office, Room 7340 Sinclair Community College • 444 West Third Street • Dayton, OH 45402-1460 Phone: (937) 512-2514

All employees shall be knowledgeable of the provisions of this policy and act accordingly.

This policy replaces all previous policies related to non-discrimination.

## Family Education Rights \& Privacy Act (FERPA)

The Family Education Rights \& Privacy Act (FERPA) grants four specific rights to current or former students with respect to their educational records at Sinclair. Those rights are a) the right to inspect and review all the information about them held by Sinclair; b) the right to seek amendment of incorrect records; c) the right to some control over disclosure of the students' education records; and d) the right to file a complaint with the U.S. Department of Education's FERPA office in Washington, D.C. For more information about students' rights under FERPA, review the Sinclair Student Records Policy, available in the Registration \& Student Records office or at:
https://www.sinclair.edu/services/welcome-center/rsr/student-records/
Problems or questions concerning the Sinclair Student Records Policy may be brought to the FERPA coordinator, director of Registration \& Student Records.

## Fraudulent Identification Policy

A Sinclair Community College student account may be administratively removed (i.e., courses, IT accounts disabled, etc.) if deemed fraudulent. For purposes of this policy, fraudulent means that the account contains false, misleading, or intentionally inaccurate information.

To administratively remove a student account based on fraud, the college will use the following procedures:

- If college officials determine a student account is fraudulent based on a reasonable interpretation of available information and records pertaining to the student and other relevant circumstances, the fraud procedure and checklist can be referenced for this purpose.
- After a determination of fraud has been made, the Vice President for Student Development or the designee will send an "Administrative Removal Letter" to the Sinclair e-mail account, which will serve as notification of the impending course withdrawal and removal from enrollment systems. A copy of this communication will be kept with the Registration and Student Records Office.
- The "Administrative Removal" e-mail will inform the student that they are being removed as a student unless they verify their identity and provide other information requested by Sinclair to establish their identity. The student will have seven calendar days from the date the email is sent to provide this information.
- If the student does not respond to the "Administrative Removal Letter," the Vice President for Student Development or the designee will submit a request to the Registration and Student Records Office to process the withdrawal/drop from all course sections, and IT will remove system access. The notation "Administrative Withdrawal" will be notated on the course section in the student information system. The student will receive a " W " on their transcript, which will be assigned by the Registration and Student Records Office.
- A student who has been administratively withdrawn from the course(s) is not eligible for a refund of tuition and fees for the course(s).
- If a student is administratively removed and later provides sufficient information or documentation satisfactory to the Vice President for

Student Development or the designee to verify their identity and/or not to be engaged in fraud, the student will be referred to the Office of the Provost. The Office of the Provost will work with the Department Chair and the Registration and Student Records Office to re-register the student for the course(s) they were administratively withdrawn from, if deemed appropriate or to take such other actions which may be appropriate to enable the student to continue their education at Sinclair. Such actions will be carried out in accordance with other applicable Sinclair policies, and the student may be required to follow the procedures in those other policies.

## Fresh Start Policy

Fresh Start allows a student, who has returned to the college after an absence of at least two years ( 6 semesters), and has completed specific requirements, a "one time only" option of having his or her grade point average recalculated from the point of re-enrollment without losing credit for previous course work for which a grade of $S, P, C$, or better was earned. Financial Aid \& Scholarships policies do not recognize the Fresh Start Policy or any changes it may have on a student's record.

The academic Fresh Start Policy and its conditions are as follows:

- To be eligible for Fresh Start, a student must:
- Re-enroll in the college after an absence of at least 6 consecutive semesters (including summers).
- Successfully complete any required Developmental (DEV) courses based on an assessment of language usage, writing, and mathematical skills.
- Successful completion of a minimum of six credit hours after reenrollment with grades of S, P, C or better. DEV courses do not count toward the 6 credit hours.
- Complete a Fresh Start form requesting to apply the policy.
- The policy can be applied only once and only to classes taken before re-enrollment. Once approved, the application of this policy to the student's record is irrevocable.
- After a student elects Fresh Start and eligibility is verified, a notation will be added to the student's transcript indicating that all Sinclair credit hours earned prior to policy enactment will be subject to the following conditions:
- Previous cumulative GPA is recalculated based upon the elimination of $\mathrm{D}, \mathrm{F}$, and Z grades.
- Credit earned at Sinclair with a grade of at least S, P, C or higher is carried over.
- Credit earned at Sinclair with a grade of "D" is forfeited.
- Grades from all course work taken at Sinclair will be shown on the transcript.
- Fresh Start may not be applied to any course previously used by the student to complete a degree or certificate.
The academic transcript will show: The Fresh Start Policy has been applied for academic work taken at Sinclair prior to Term/Year.


## Grades

The grade point average is computed by dividing the total points earned by the total credit hours attempted. Courses in which a student earns grades of X, I, W, P, N, S, IP, U, Y are not computed in the total credit hours attempted.

The Financial Aid \& Scholarships office may evaluate grades differently when determining Satisfactory Academic Progress. For additional information, review the Financial Aid \& Scholarships policy.

Students may be given an "I" grade if their work has not been completed. The students must contact their instructor and request an I grade. If the instructor agrees, the students and instructor must sign the "Incomplete Grade Contract." When the required work is completed within 30 calendar days after the beginning of the next term, a grade will be submitted for the "I" grade. If this is not removed within this time, the "I" becomes an "F." This time limit may be extended by special permission of the instructor.

If the student fails to contact the instructor to arrange an incomplete grade, the instructor is required to assign an "F" instead of an "I" for the term's work. For cases in which hardships are involved, the student may make up the work which could change the "F" to the grade otherwise deserved. The instructor's permission is required and must be done before term ends.

## Exception: Flight Lab Completion Requirements/Registration in

 subsequent labsYou have two consecutive semesters to complete the Private, Instrument, Commercial-Multi, CFI, and CFII courses and three consecutive semesters to complete the Commercial rating. If your flight training is not complete at the end of the semester limit, you will be removed from the flight lab. At the end of the initial semester, if you are not complete, your flight instructor will schedule your new flight slots for the next semester and you will fill out an incomplete request form so that the "I" grade can be issued. If the form is not filled out and you do not schedule flight slots for the next semester, you will be issued a grade of " F " and you will be dropped from the flight lab.

If you do not complete the course in the allotted semester time limit, you will need to reenroll in the course in its entirety. If the program is full at the time you seek to reenroll, you will be put on the waitlist. Additional time for completion will be allotted if you are on place on active duty military-orders. Extensions to the semester time limit for other reasons will be considered on a case by case basis.

Based on the above guidance the requirement to maintain an Incomplete (I) grade is as follows:

1. additional semester plus 30 days for AVT 1124, 1126, 1224, 1226, 2266, 2269, 2271, 2277, 2278 AND 2286.
2. additional semesters plus 30 days for AVT 2263, 2264 AND 2265

An "N" grade indicates the student attended classes and made satisfactory progress but did not complete all course requirements. A " Z " grade indicates the student was registered for class but never attended. To challenge a grade the student believes is incorrect he/she must contact the instructor as soon as possible.

Under no circumstance will a grade be changed after two years have elapsed from the end of the term in which the grade was recorded. Within the two-year limitation, a petition may be filed with the office of the Associate Provost asking consideration for change of "F" grade to "W," ONLY if emergency circumstances supported by documentation prevented either withdrawal by deadline date or completion of class requirement after that date.

## Dean's List

To be eligible for the Dean's List in any term, students must have:

- Six or more credit hours of college level course work
- A grade point average of 3.4 with no grade below a C for that term
- Good academic standing

Courses for which students earn grades of X, IP, I, W, P, N, S, or Y are not computed into total credit hours attempted. Their placement on the Dean's List will be noted on their academic transcript.

## Academic Intervention, Probation, Dismissal

- All students must maintain a minimum academic performance of at least a 2.0 GPA cumulatively ( 2.0 or greater).
- Students will be placed on the following academic standards:
- First semester below 2.0 GPA-Academic Intervention
- Second consecutive semester below 2.0 GPA-Academic Probation
- Third consecutive semester below 2.0 GPA-Academic Dismissal If the term GPA is 2.0 or above, the student will remain on Academic Probation.
- Students will be returned to good academic standing when a cumulative GPA of 2.0 or greater is earned.
- Students who are on academic intervention or academic probation will receive correspondence that refers students to academic/faculty advisors/coaches, and Student Affairs for advising, academic assistance, and information on the impact on financial aid.
- Students who are on academic probation must be seen by an academic/faculty advisors/coaches to:
- register or add classes.
- receive additional support information or assistance.

Students whose semester GPA is 2.0 or greater, but whose cumulative GPA would cause them to be dismissed, will be granted an additional probationary period for each semester in which the semester GPA is 2.0 or greater.

NOTE: Financial aid considers all assigned grades when calculating cumulative grade point average for satisfactory academic progress evaluation.

## Grade Quality Points

A Excellent 4
B Good 3

C Average 2
D Passing 1
F Failure 0

Z Non-Attendance 0

U Unsatisfactory 0
I Incomplete 0

| Grade | Quality Poin |  | Symbols |  |
| :---: | :---: | :---: | :---: | :---: |
| Y | Proficiency Credit | 0 | \# | Grade was earned by proficiency examination |
| W | Withdrawal | 0 | // | Course has been repeated; this grade is not included in current |
| P | Pass | 0 |  | GPA |
| N | Progress | 0 | $=$ | Course equates to and replaces previous course |
| IP | In Progress | 0 |  |  |
| X | Audit | 0 | : | Grade not incuded in the Fresh Start Policy Calculation |
| Grades not used in calculation of grade point averages |  |  | Prior to Fall 1982 grades for courses not applicable to a new major were not considered in computing the student's cumulative grade point average. Effective Fall 1982 all courses on the student's record are included in the cumulative grade point average. |  |
| AA | Articulation Agreement |  |  |  |
| AC | Articulated Credit |  |  |  |
| AP | Advanced Placement |  |  |  |
| CE | Continuing Education |  | Graduation |  |
| CL | College Level Examination Program (CLEP) |  | The Registration \& Student Records office is responsible for identifying students who have met all their credential requirements. Once a student is listed as a candidate for graduation and completes all required coursework the credential will be awarded even if the student requests a change of study but still completes the previous program. |  |
| DS | DANTES (DSST) (Standardized Subject Test) |  |  |  |
| I | Incomplete |  | Students will rece office during the | n email from the Registration \& Student Records in which they are enrolled in the final courses |
| IP | In Progress |  | needed to comple <br> This email will s | ir degrees, certificates or short term certificates. <br> confirm that the student has indeed registered |
| N | Progress |  | for the necessary courses, can expe | ses and, pending successful completion of those receive their diplomas or certificates at the end |
| P | Pass |  | of the term. Once students will be | courses have been completed successfully, ted. They will receive their diplomas or |
| S | Satisfactory | mpletion | certificates throug the end of the term | U.S. Postal Service in six to eight weeks after |
| U | Unsatisfactor |  |  |  |
|  |  |  | Important points | aduating students to do during their last term: |
| WC | WEBCAPE |  |  |  |
| W | Withdrawal |  | - Check with an are correctly reco - Check their Sin | mic advisor to ensure their academic programs emails. |
| X | Audit |  | - Be sure the Re mailing addresses. | tion \& Student Records office has their correct |
| Y | Proficiency | dit | Student must earn academic program credit hours of their | nimum of 15 semester credit hours of their n Sinclair or must earn the last 15 semester ademic program at Sinclair. |
| Symbols |  |  | Graduation honors are also noted on the transcript. Sinclair awards "graduation honors" for a cumulative grade point average of 3.4 to |  |
| * | Course has been completed previously |  | 3.899. The college awards "high honors" for a cumulative grade point average of 3.900 and above. |  |

## Participation in Commencement

Students earning their associate or bachelor degrees will be offered the opportunity to participate in Sinclair's annual commencement ceremony. This ceremony takes place in May. Participation in the commencement ceremony is limited to those students earning associate or bachelor degrees.

Honors and high honors for the commencement ceremony are determined by the cumulative grade point average at the end of the Fall Semester. To qualify for honors a student must have a cumulative grade point average between 3.400 and 3.899. To qualify for high honors a student must have a cumulative grade point average 3.9 or better. Graduates with Honors or High Honors will wear a gold honor cord draped along their shoulder..

## Guarantees

Sinclair Guarantee-What happens after graduation? The Sinclair Guarantee of Graduate Quality gives graduates two guarantees they can count on:

- A guarantee of transfer credit for graduates receiving Associate of Arts and Associate of Science degrees at Sinclair Community College, for entering a university parallel/transfer program with confidence.
- A guarantee of job competency for those who have obtained an Associate of Applied Science degree at the college and wish to enter a technical career program.
This tuition-free education as described below constitutes the sole and exclusive remedy under the Sinclair Guarantee of Graduate Quality.


## Guarantee of Transfer Credit (AA and AS Degrees)

For students thinking about pursuing a four-year degree, Sinclair Community College guarantees to its Associate of Arts and Associate of Science graduates the transfer of course credits to those Ohio colleges or universities that have articulation agreements with Sinclair Community College.

The guarantee applies only to courses included in a written transfer/articulation plan that must be on file in the Provost office.

Limitations on the total number of credits accepted in transfer, grades required, relevant grade point average, and duration of transferability apply as stated in the catalog of the receiving institution. Cost of books, insurance, laboratory and activity fees, and other course related expenses are the responsibility of the graduates. For details about the guarantee, see an academic advisor.

## Guarantee for Job Competency (AAS Degrees)

Graduates looking for a technical job should be sure to tell potential employers that they are Sinclair graduates. Many of them know that Sinclair Community College guarantees appropriate technical job skills identified in the program outcomes for a specific degree to its Associate of Applied Science graduates. And, if the employer feels the graduates are lacking in technical job skills identified by the program outcomes for the specific degree program, the college will provide the graduates with up to nine (9) tuition free credit hours of additional training by Sinclair Community College, under the conditions of the guarantee policy.

The guarantee applies only to graduates employed on a full-time basis directly related to the area of program concentration as certified by the Provost. Employment must commence within 12 months of graduation.

Cost of books, insurance, uniforms, laboratory and activity fees, and other course related expenses are the responsibility of the graduates and/or the employers.

## Special Conditions for the Job Competency Guarantee

The employer must:

- Certify in writing the employee is lacking job skills related directly to the degree's program outcomes.
- Specify areas of deficiency within six months of the initial employment.
- Develop a written educational plan for retraining the graduate in cooperation with the appropriate academic department at the college.
- Retraining will be limited to nine (9) semester hours of credit related to the identified skill deficiency and to those classes regularly scheduled during the period covered by the retraining plan, and must be completed within a calendar year from the time the educational plan is agreed upon.
- The guarantee does not imply the graduate will pass any licensing or qualifying examination for a particular career.


## Harassment Policy

Sinclair Community College is committed to maintaining an environment free from harassment. The college's Student Harassment Policy-pertaining to student on student harassment, and Employee Harassment Policy and Procedure-pertaining to harassment by employees against either students or other employees, can both be found on the College's intranet website, my.sinclair.edu, and on the Human Resources webpage. These policies both pertain to harassment other than sexual harassment. (The college has a separate Campus Security Report and Non-Discriminatory Practices.)

Inquiries concerning the Student Harassment Policy should be referred to the Vice President for Student Development. A complaint of harassment by a student against another student should be reported to any of the following persons: Vice President for Student Development, Director of Student Affairs, Dean, or Department Chairperson.

Inquiries concerning the Employee Harassment Policy should be referred to the Equal Opportunity Officer/Director of Human Resources. A complaint of harassment on the part of a College employee against a student or another employee should be reported to the Equal Opportunity Officer/Director of Human Resources, the complaining employee's supervisor or supervisor's superior, Department Chairperson, Dean, or Vice President for Student Development.
www.sinclair.edu/services/conduct-safety/student-judicial-affairs/student-code-of-conduct-handbook/

## Honors Program

Academic Honors offers many rewards:

- Availability of Sinclair Academic Excellence Scholarships
- Opportunity to participate in Service Learning
- Academic challenge and personal enrichment
- Honors designation on transcript
- Special commendation as an Honors Scholar after completing required courses
- Attendance at regional meetings of Honors students and faculty from other colleges and universities
- Better preparation for entering baccalaureate and advanced programs
- Increased opportunities for financial aid and membership in honor organizations like Phi Theta Kappa
- Scholarships and/or transfer articulations with Miami University, University of Dayton and Wright State University.
Students can participate in Honors in two ways:


## Individual Honors Courses

Students with a 2.8 GPA may enroll in individual Honors courses whether or not they plan to become Honors Scholars. To receive Honors credit, a student must earn a minimum of " B " in the course. What honors courses will be offered next term? Ask your instructor! Any course on campus or online beyond the Developmental level may be taken with an Honors option, with the approval of the instructor and the department chair. To find courses, students can search the online course schedule planner by keyword. Enter "honors" in the search box under keyword and a list of courses offering honors options will come up.

## Honors Scholars Program

Students may apply to become Honors Scholars. Interviews take place each term. Upon acceptance, scholars undertake to complete four honors experiences while maintaining an overall 3.25 GPA . Two of the four honors courses must be in different disciplines and one course must be Interdisciplinary. The interdisciplinary requirement may be waived if courses are taken from four different disciplines.

In addition to other financial aid and scholarships, Honors Scholars may apply for up to six Academic Excellence Scholarships on a perterm basis during their time in the program.

Honors Scholars are required to fulfill a Service Learning requirement before completing the program. Students will perform unpaid community service as part of a selected Honors course or just on their own. Students seeking help in choosing a service project are encouraged to contact Sinclair's Service Learning office at: www.sinclair.edu/service-learning

Find the application and other Honors Program forms at: www.sinclair.edu/academics/honors-program/honors-forms/

## More details about Service Learning visit: www.sinclair.edu/servicelearning

## Late Registration

Students may register for open classes during Sinclair's official late registration period after first payment due and before first day of the semester.

- Late registration period is the week before each term begins. See the online class schedule for exact dates for each term.
- To audit a class, students register during late registration; there is no late fee charge. Register in person only.
NOTE: Sinclair classes are considered to have met as of midnight on the second day of the term.


## Medical or Mental Health Withdrawal

A medical or mental health withdrawal is defined as withdrawal from classes due to a severe medical condition, either physical or emotional. It is intended for use only in extraordinary circumstances in which unanticipated serious illness or injury prevents a student from continuing to attend or participate in one or more classes and must be submitted no later than two years following the term when the grade was recorded.

## Request Process:

- Withdrawals requests based on physical or emotional issues should be completed as soon as possible by the student or the student's legal guardian and submitted
electronically www.sinclair.edu/about/offices/provost/academic-petition-form-medical-or-mental-health-withdrawal/.
- Medical statement must be completed by physician and/or
therapist www.sinclair.edu/medical-health-withdrawal. All application materials will be confidentially maintained.
- If you receive financial aid or veterans benefits, discuss the impact of your withdrawal on your eligibility for the assistance received.
- Students receiving financial aid or military-related funding should speak with departmental staff members in the Military Family Education Center or with an enrollment specialist in the Welcome Center to have an understanding how it may impact their current financial aid, or future financial aid.
- Students requesting to be withdrawn from classes may be required to return their financial aid refund amount for that semester.
- If the withdrawal is approved, the student will receive a W on the transcript for all courses approved.
For more information, or assistance in initiating this process, contact the office Student Affairs (937) 512-2291


## Military Training

Sinclair evaluates military training according to the American Council on Education (ACE) recommendations. Please refer to the Transfer of Credit to Sinclair policy for complete instructions on how to submit transcript.

## My Schedule

My Schedule provides students with their course schedule for the term in a weekly format. My Booklist provides students with a list of required and/or recommended books for their courses as well as the ISBNs and prices for each book. This book list provides a direct link purchase books from eCampus. To use these tools, log into my.sinclair.edu, click on the registration portal, and select My Schedule or My Booklist on the left side of the page.

Students can also access their schedule by logging in to my.sinclair.edu, selecting the Term Statement on the student
finance portlet, and clicking View Statement. This term statement includes dates classes begin, dates to withdraw without records, dates to withdraw with record, and end of term dates for each class.

## National Change of Address

In accordance with the United States Postal Service regulations effective January 4, 2010 all addresses are required to go through a Post Office approved validation process. A process is run every 90 days to verify a student's address matches with the United States Postal Office. If there is a discrepancy, a student's address will be updated and could affect your residency/tuition.

## One Year Time Limit on Math Prerequisites

The following policy applies to all math courses with a MAT course designation except for MAT 1110 , MAT 1120 , and MAT 1130 .

Students registering for a MAT course are required to have completed the prerequisite course not more than one calendar year prior to the semester in which they are taking the given MAT class. This means the prerequisite course must have been taken in one of the three consecutive semesters (including summer) immediately prior to the semester in which they want to take the given MAT class. For example, in order to register for MAT 1570 in the fall of 2024, a student must have taken the prerequisite course MAT 1470 no earlier than the fall 2023 semester.

Students whose prerequisites for MAT courses were completed more than one calendar year ago should see an academic advisor for assistance in registering for a MAT course.

NOTE: This policy does not apply to courses offered by other departments that have a MAT course as a prerequisite.

## Personal Data

To change a name or address:

- Apply online at: my.sinclair.edu, or
- Complete the online Change of Information Form at
https://www.sinclair.edu/services/welcome-center/rsr/forms/name-
address-phone-changes/change-of-information-form/
To change a social security number, students can log into my.sinclair.edu, select Registration and Student Records in the Secure Document Upload tile, and upload a copy of the social security card. Military-affiliated students must report any change to the Military Family Education Center (MFEC) in person or online at Dayton Campus, Building 10, Room 10444 or via email at: mfec@sinclair.edu.

A change of address does not automatically change residency for fee purposes. For that, students must file a separate application for a change of residency and show proof of eligibility at Registration \& Student Records. For deadline dates, see Registration at:
www.sinclair.edu/registration-calendar; call (937) 512-3000 or (800) 315-3000.

To change a name, proper court documentation for Name Change can be submitted in-person or through my.sinclair.edu through the Secure Documents Upload tile.

## Prerequisites

Some courses have prerequisites which are other courses that must be successfully completed prior to taking these courses. Many beginning classes require the placement testing or completion of developmental or remedial courses before students may enroll in them.

Transfer and transient (visiting) students who have completed prerequisite courses at another institution may bring an unofficial transcript or a grade card to an academic advisor for review. If the students wish to receive credit for those courses at Sinclair, they must have their official transcript sent from their former institution to the Sinclair Registration \& Student Records office.

## Prior Learning Assessment Programs

The Prior Learning Assessment (PLA) Program offers students a variety of options to demonstrate learning they've done outside the college classroom. Assessments available include course specific proficiency exams, evaluation of industry training and credentials, portfolio assessment, and standardized exams.

Students interested in PLA should review the different PLA opportunities Sinclair offers to understand the processes, forms, and policies associated with each option. Students should also meet with an Academic Advisor to determine which PLA option best suits their academic goals and program requirements.

## Students should know before starting PLA:

- Students must have an active record with Sinclair.
- Any credit earned through PLA does not count toward institutional residency requirements.
- Credit will be awarded regardless of the active declared program; applicability is based on individual program requirements.
- All fees charged for the cost of assessment for proficiency exams or portfolio assessments are non-refundable.
- Courses awarded via PLA will be added to students' transcripts and may factor into GPA and SAP calculations.
- PLA credit is recommended to transfer to other Ohio institutions; however, it is not guaranteed. Students must confirm with the accepting institution and program to determine how PLA credit may transfer and apply.


## Advanced Placement (AP) Program

The College Board's AP Program (http://apcentral.collegeboard.com) offers high school students the opportunity to earn college course credit by providing examinations in 34 introductory courses in 20 fields. To have AP scores reported to Sinclair Community College, use school code 1720. For AP exams taken previously, contact the College Board at (888) 225-5427 or via the College Board website
(https://apstudents.collegeboard.org) to request that an official score report be sent to Sinclair. Students with an AP exam score of 3 or above will be awarded the aligned course(s) and credits for the AP exam(s) successfully completed. Additional information can be found on the PLA website.

## American Council on Education (ACE)

ACE provides credit recommendations for a variety of industry training, examinations, and coursework. Students are encouraged to send their official ACE transcripts to Sinclair for evaluation. Information on ordering transcripts, organizations served, courses and exams can be found at National Guide resource
(http://www2.acenet.edu).

## Articulated Credit

Articulated credit is earned via industry licensures, credentials and certifications. Students are encouraged to present any credentials they've earned to their academic advisor. Most credentials must be current or active and require department chair evaluation. If determined eligible, credit will be awarded to the student's Sinclair transcript. This evaluation process is completely free.

## College Level Examination Program (CLEP)

CLEP offers standardized exams that can equate to specific Sinclair courses with a qualifying score. To determine the score needed to earn credit at Sinclair, please visit the PLA website. Interested students are able to purchase exams, find testing locations, and submit official transcripts via the College Board website. Sinclair school code: 1720.

## DANTES Subject Specific Test (DSST)

DANTES Standardized Subject Tests are standardized exams that can equate to specific Sinclair courses with a qualifying score. To determine the score needed to earn credit at Sinclair, please visit the PLA website. Interested students are able to purchase exams, find testing locations, and submit official transcripts via the Get College Credit website Sinclair school code: 9309.

## Portfolio Based Evaluations

Portfolio assessment allows students to build an academic portfolio tying their prior learning and experience to the outcomes of a specific course. This option is typically pursued for upper-level classes, capstones, or other classes for which there is no other PLA option. Students should verify their eligibility with an Academic Advisor and can submit their request via the PLA website.

## Proficiency Exams

Sinclair offers over 150 different proficiency exams in several academic departments. Students who meet course prerequisites are eligible for course specific proficiency testing, and grades of C or higher will be awarded. Students should verify their eligibility with an Academic Advisor and can submit their request via the PLA website.

## Readmission Policy for Dismissed Students

If you have been dismissed from Sinclair for academic reasons and would like to be readmitted, you must petition for readmission. The petition must be submitted to an academic advisor at least three weeks before the first day of classes for the term you would like to attend.

If you are dismissed for the first time, you must remain out of school for a minimum of one term, including summer. For example, if the
dismissal was at the end of fall term, you cannot attend spring term but may petition for readmission to summer term. If you are dismissed a second time, you must remain out of school for an academic year (three terms).

If you are dismissed for the third time, you will not be readmitted to Sinclair unless there are documented, extenuating circumstances.

To be considered for readmission, you must:

- Meet with an Academic Advisor a minimum of two times
- Complete a readmission petition
- Meet with a representative from Counseling Services as referred by your advisor
- Take any required placement tests

Call 937-512-3700 to schedule an appointment with an academic advisor on the Dayton campus to begin the readmission process or meet with an academic advisor at one of our regional centers.

Petitions for readmission are available from the student's academic advisor.

Veterans Note: To re-establish VA educational benefits, a student must submit a copy of the readmission paperwork to the Military Family Education Center (formerly Veteran Services) in person, Dayton Campus, Building 10, Room 10444, or via email to mfec@sinclair.edu, after readmission to the college.

## Refund of Fees

- To receive a refund of fees, students must file the appropriate Drop/Add/Withdraw form online through the Student Self-Service Portal within the specified refund period, which is published online at through the registration calendar.
- If students withdraw by the eighth calendar day from a full-term course (including Saturday and Sunday) of fall, spring and summer terms, a 100 percent refund will be issued (see refund information at the end of this section). After that date, students will receive no refund for dropped courses. Different refund schedules apply for courses that have beginning and ending dates that do not correspond to the fulllength term dates. It is the student's responsibility to be aware of this information and other matters related to his or her registration. For more information, contact the Dayton Campus Welcome Center (First Floor, Building 10), any of the regional centers, or visit the registration calendar at www.sinclair.edu.
- If students withdraw after the eighth day of the full term, they will not receive a refund of tuition or fees unless the withdrawal was due to exceptional circumstances such as a medical emergency, family death, military deployment, etc. For consideration of the specific situation, students must submit a tuition refund appeal request with support documentation to the Bursar's Office, lower level of Building 10, Room 016 or submit the appeal online. Students may access the Tuition Refund Appeal form and policy at: www.sinclair.edu/ bursar-refundpolicy, select the Tuition Refund Appeal Form link, and follow the steps accordingly. Financial aid or third-party funding may be adjusted due to course drops or withdraws and could be impacted with an approved tuition refund appeal. Refer to the Financial Aid Add/Drop Census Date Policy beginning on page 19, the Withdrawal \& Return of Title IV funds beginning on page 29, and Veterans \& Military Benefits beginning on page 31 for additional information.
- If Sinclair Community College cancels the student's class, the student will receive a 100 percent refund.
- Sinclair utilizes BankMobile Disbursements a technology solution, powered by BMTX, Inc. to deliver student refunds. For more information about BankMobile, please
visit: http://bankmobiledisbursements.com/refundchoicessso/. The first refund disbursement of each term begins approximately 30 to 45 days after the start of the term. Refunds are processed weekly after the first refund of each term. All students are required to select a refund delivery preference through BankMobile Disbursements. All refunds will disburse from BankMobile Disbursement and is dependent upon the refund delivery preference selected by the student. If a selection is not made, a significant delay could take place if a student is due a refund. Instructions for making a refund preference can be found www.sinclair.edu/bursar-refund-policy. If payment was made by Visa or MasterCard, the refund may be issued back to the Visa or MasterCard used for payment through Sinclair. If payment was made by a third party or Financial Aid the refund may need issued back to them and not to the student.


## Repeating a Course

A student may repeat a course for any reason. When a course is repeated, the most recent grade will be used in calculating the cumulative grade point average (GPA) in place of the original grade. All grades will remain on the transcript even if they are not counted in the cumulative GPA.

There are some courses which will be counted in the cumulative GPA each time they are taken; the original grade is not replaced by the second one. Such courses are designated in the course descriptions with an $R$. If a student wants to have the previous grade in such a course replaced by a later grade, special arrangements must be made with the department chairperson.

Financial aid will only pay for one repetition of a passed course. For financial aid purposes, a "D" grade is considered passing. Review the Financial Aid policy section for additional information.

## Residency Rules

Residency status of each student is determined during the admissions process. Tuition surcharges to the student and college's subsidy payments are based upon that decision. The definitions and rules used by all Ohio educational institutions are contained within the document entitled Ohio Board of Regents 3333-1-10, generically known as Rule 10.

A student who is a non-resident of Ohio must pay a tuition surcharge in addition to other fees. The following rules determine who can be considered an Ohio resident:

- To be considered a resident of Ohio a person must maintain residence in Ohio for 12 months, be qualified to vote in Ohio and to receive state welfare benefits, and be subject to tax liability under Section 5747.02 of the Ohio Revised Code. A person is not permitted to remain a resident of any other state or nation for any purpose within the time prescribed.
- A person who has established a place of residence in Ohio for the purpose of attending a college or university will be considered a nonresident for fee purposes.
- A person admitted to this country as a resident alien may establish Ohio residency in the same manner as any other non-resident.
- An alien admitted to this country on a student visa or other visas, which do not qualify the person to remain in this country on a permanent basis, will be considered a non-resident for fee purposes. Within the above stated general rules, a student will be considered a resident for fee purposes if the student:
- Has resided in Ohio for at least 12 consecutive months immediately preceding enrollment and is not receiving, and has not received in that time period, financial support from persons or entities who are not residents of Ohio.
- Is a dependent student and at least one of his or her parents or legal guardians has been a resident for at least 12 consecutive months immediately preceding enrollment.
- Is living in Ohio and employed on a self-sustaining basis in Ohio, and is attending college on a part-time basis. The student's spouse who is a full-time homemaker will also be considered gainfully employed.
- Has a parent or spouse who has accepted full-time employment and has established a place of residence in the state of Ohio as of the first day of the term the student enrolls.


## Specific Exceptions

The student, his or her dependents, and spouse are considered residents of Ohio if the person:

- Is on active duty in the armed forces of the United States and is stationed and resides in Ohio.
- Forever Buckeye extends the in-state resident tuition rate to any public or private Ohio high school graduate who leaves the state but returns to enroll in an undergraduate or graduate program at an Ohio college and also establishes residency in Ohio. The Forever Buckeyes provision of law removes the 12 -month period of establishing domicile in Ohio before becoming eligible for in-state tuition rates.
- Is on active duty in the armed forces of the United States, and Ohio is the state of residence for legal purposes.
- Is transferred by his or her employer beyond the territorial limits of the 50 states of the United States and the District of Columbia, and Ohio is the state of residence for legal purposes.
- Has been employed as a migrant worker in Ohio and has worked in the state at least four months during each of the three years preceding the date of enrollment.


## Montgomery County

A student who qualifies as a resident of Ohio, but does not qualify for Montgomery County residency, must pay an instructional surcharge in addition to other fees.

- The student must qualify as a resident of the state of Ohio in order to qualify as a resident of Montgomery County.
- A person who has established a place of residence in Montgomery County for the purpose of attending Sinclair will be considered a nonresident for fee purposes.
- A student who has been classified as a Montgomery County resident shall be considered to have lost his or her residency after he or she (or in the case of a minor), his or her parents or legal guardian move out of the county.

Within the above stated general rules, a student will be classified as a resident of Montgomery County for fee purposes if the student:

- Has resided in Montgomery County for at least 12 consecutive months immediately preceding enrollment at Sinclair and is not receiving, and has not directly or indirectly received during that time, financial support from persons or entities who are not residents of Montgomery County.
- Is a dependent student and at least one of his or her parents or legal guardians has been a resident of Montgomery County for at least 12 consecutive months preceding enrollment.
- Is gainfully employed on a self-sustaining basis and resides in Montgomery County and is enrolled on a part-time basis (less than 12 credit hours). The spouse who is a full-time homemaker will also be considered gainfully employed.
- Has a parent or spouse who has accepted full-time employment and has established a place of residence in Montgomery County as of the first day of the term the student enrolls.


## Specific Exceptions

The student, his or her dependents, and spouse will be considered residents of Montgomery County if the person:

- Is on active duty in the armed forces of the United States and is assigned to Wright-Patterson Air Force Base.
- Entered active duty in the armed forces of the United States as a resident of Montgomery County and can provide proof of eligibility to vote in the county and intends to maintain Montgomery County as the legal residence.
- Has been employed as a migrant worker in Montgomery County and has worked in the county at least four months during each of the three years preceding the date he or she enrolled.
If a student has been classified as a non-resident of the State of Ohio or Montgomery County, he or she must apply for reclassification when the student meets the qualifications for residency. A change of address does not automatically change residency.

The student must present evidence to support the request for reclassification, including proof of place of residence, place of employment, and sources of financial support. If the student is reclassified from non-resident to resident of Ohio or Montgomery County, he or she will be eligible to pay the resident fees from the date of reclassification; the reclassification will not be retroactive to any previous term.

Information concerning residency and residency forms are available at https://www.sinclair.edu/ services/welcome-
center/rsr/forms/change-of-residency/. Requests for reclassification and supporting documents must be submitted prior to the deadline listed on the residency application.

Residency information obtained from the application for admission (more than the current address) will be used to determine residency for tuition purposes. If students feel they qualify as a State of Ohio or Montgomery County resident, contact the Registration \& Student Records office, (937) 512-3000, for specific policies, procedures, time frames, and required documentation.

## Selective Service Fees

Ohio law requires that all males who are not in compliance with the federal Selective Service laws pay out-of-state fees. All males who are 18 through 25 years of age must be registered with Selective Service. Men who are on active duty in the U.S. military service are exempt. Students who are not in compliance will be assessed out-of-state fees and, if the fees are not paid within the specified period, the students may be withdrawn from all classes. Students may register at any U.S. post office or at: www.sss.gov

For information concerning status, call (708) 688-2576, MondayFriday, 8:30 a.m.-6:45 p.m.

## Sexual Harassment and Sex Discrimination Policy \& Procedure (Title IX)

## Notice of Non-Discrimination

"No individual in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." - Title IX of the Education Amendments of 1972, and its implementing regulation at 34 C.F.R. Part 106 (Title IX)

Sinclair Community College is committed to providing an academic, work, and study environment free of inappropriate and disrespectful sexual conduct and communication in any form. Sinclair will conduct its programs, services, and activities in accordance with applicable federal laws, including Title IX of the Education Amendments of 1972, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination (SaVE) Act, as well as state and local laws, and Sinclair policies.

## New Title IX Sexual Harassment and Sex Discrimination Policy and Procedures Adopted

On May 6, 2020 the U.S. Department of Education issued new Title IX regulations that make significant changes to the former Title IX policy and procedures used by Sinclair College. These new regulations, effective August 14, 2020, limit the scope and jurisdiction under which an individual may file a complaint, narrows the definitions of prohibited conduct, and uses a different approach to due process requiring that new grievance procedures be adopted and published by the College. They are a significant shift from the former Title IX processes.

As always, Sinclair's Title IX Office works to support a safe, respectful and healthy learning and working environment for all students, employees, and other College community members. With those principles in mind, Sinclair has aligned the College's new Title IX policy and procedures with the mandates in the new regulations. Sinclair's President has established new Title IX Sexual Harassment and Sex Discrimination Procedures to comply with applicable statutes, regulations, and official guidance. Sinclair's Board of Trustees adopted a new Sexual Harassment and Sex Discrimination Policy on September 15, 2020 to carry out Sinclair's obligations under Title IX and the new regulations.

Sinclair's responsibilities and programs for preventing sexual harassment and sex discrimination and addressing it when it occurs are coordinated by the Sinclair Title IX Coordinator. Resources are
available for students and employees to address concerns pertaining to sex discrimination, including sexual harassment.

If you require information, support, or would like to file a complaint, contact the Sinclair Title IX Coordinator or the Deputy Title IX Coordinator:

Title IX Coordinator OR<br>Deputy Title IX Coordinator<br>444 West Third Street<br>Dayton, Ohio 45402<br>Office Phone: 937-512-2961<br>Office Fax: 937-512-2777<br>Campus Location: Building 7, Room 343<br>Email: TitleIX@sinclair.edu

Sinclair strongly encourages individuals who believe that they or someone else has been the victim of sexual assault, domestic violence, dating violence, stalking, and/or other forms of sexual misconduct offcampus to contact Dayton Police and to notify Sinclair Police immediately. Anyone who believes that he or she or someone else has experienced these acts on campus should contact Dayton Campus Police at (937) 512-2700 or dial 911 from any location.

The United States Department of Education, Office for Civil Rights (OCR) is the division of the federal government charged with enforcing compliance with Title IX. Information regarding OCR can be found at www.ed.gov/about/offices/list/ocr/index.html.

## Short-Term Certificate Programs

To qualify as a short-term certificate (1-29 credit hours) candidate, a student must:

- Fulfill requirements of the short-term certificate program and the institution. *
- Complete the minimum program hours. **
- Maintain a cumulative grade point average of at least 2.0 either overall
or
- Maintaining a GPA of at least 2.0 within their program of study.
*Generally, a student meeting all short-term certificate (STC) requirements in effect at the time they began their coursework for an academic program will qualify for a credential.
**Generally, the requisite semester hours must be earned at Sinclair College or through other arrangements with other regionally accredited institutions or contractual relationships approved by industry partners and educational entities. To qualify for a short-term certificate of completion consisting of 18 credit hours or less, students must complete at least $50 \%$ of Sinclair course work at Sinclair Community College within the area of study to fulfill the institution's requirements. Students are required to take a minimum of 9 semester hours of Sinclair College coursework to complete a short-term certificate consisting of 19 hours or more.

Due to the specialized structure of short-term certificates consisting of 19-29 credit hours, students may be required to take a minimum of 9 semester hours of Sinclair coursework within the area of study to fulfill institutional requirements.

If the short-term certificate is a lecture/lab combination or only 1 course is required, $100 \%$ of the coursework must be completed at Sinclair.

Disclaimer: If the short-term certificate is regulated by an agency outside of Sinclair, then the student must complete the minimum curricular requirements as defined by that agency.

For more information about degree related policies mandated by the Ohio Department of Higher Education (ODHE), visit:
https://www.ohiohighered.org/content/short_term_certificate_program

## Standards of Academic Progress: Academic Intervention, Probation, Dismissal

Students who earn/maintain a GPA of 2.0 or higher are defined, by college policy, to be in good standing.

Cumulative GPA is calculated each term a student is enrolled in courses for credit. The grade point average is computed by dividing the total points earned by the total credit hours attempted.

Semester GPA is calculated each term a student is enrolled in courses for credit. The grade point average is computed by dividing the points earned for the term by the credit hours attempted for the term.

- All students must maintain a minimum academic performance of at least a 2.0 cumulative GPA ( 2.0 or greater).
- Students who do not meet the 2.0 requirement will be placed on the
following academic standards:
- First semester cumulative GPA below 2.0 GPA - academic intervention
- Second consecutive semester cumulative GPA below a 2.0 GPA -
academic probation
- Third consecutive semester cumulative GPA and semester GPA below a 2.0 GPA - academic dismissal
Note: Students whose semester GPA is 2.0 or greater, but whose cumulative GPA would cause them to be dismissed, will be granted an additional probationary period for each semester in which the semester GPA is 2.0 or greater.
- Students will be returned to good academic standing when a cumulative GPA of 2.0 or greater is earned.
- Students who are on academic intervention or probation will receive correspondence that refers them to academic advisors for course permissions and the Welcome Center for academic assistance and information on the impact to financial aid.
- Students who are on academic intervention or probation must consult with an academic advisor to register or add classes.


## Student Religious Accommodation Policy

## I. INTRODUCTION

This Policy is adopted by the Board of Trustees of Sinclair Community College ("Sinclair") in compliance with Ohio Revised Code Section 3345.026, known as "The Testing Your Faith Act." This statute requires each state institution of higher education to "adopt a policy that reasonably accommodates the sincerely held religious beliefs and practices of individual students with regard to all examinations or other
academic requirements and absences for reasons of faith or religious or spiritual belief system."

The requirements set forth in Ohio Revised Code Section 3345.026 and this Policy are in addition to the general obligations Sinclair has under the Constitutions and laws of the United States and the State of Ohio, and this Policy is not intended to limit or restrict Sinclair's compliance or students' rights under those provisions.

## II. SCOPE AND APPLICABILITY

This Policy applies to all Sinclair students enrolled in courses for academic credit and to the instructors teaching those courses. For purposes of this Policy "instructor" includes tenured or tenure track faculty, annually contracted faculty, adjunct instructors (regardless of whether they are employed directly by Sinclair), and any other employee, such as a program coordinator or laboratory technician, serving as an instructor for any course or portion of a course for which Sinclair awards academic credit.

## III. STUDENTS' RIGHTS UNDER THIS POLICY TO RELIGIOUS ACCOMMODATION

A. A student shall be permitted to be absent for up to three (3) days each academic semester to take holidays for reasons of faith or religious or spiritual belief system or participate in organized activities conducted under the auspices of a religious denomination, church, or other religious or spiritual organization. Sinclair shall not impose an academic penalty as a result of a student being absent as permitted in this Policy.
B. Instructors shall include in each course syllabus a statement regarding this Policy. The statement shall include both of the following:

1. A description of the general procedure for requesting accommodations (Section IV. A-D, below.
2. The following contact information for Sinclair's Associate Provost, who is designated as the Sinclair employee a student may contact for more information about this Policy and for processing student grievances/complaints as set forth below:

Associate Provost
444 West Third Street

Dayton, Ohio 45402-1460
937-512-2522
Provost@sinclair.edu

## IV. GENERAL PROCEDURE FOR REQUESTING RELIGIOUS ACCOMMODATIONS

A. All Instructors must provide students with alternative accommodations regarding examinations and other academic requirements missed due to an absence described under this Policy to take holidays for reasons of faith or religious or spiritual belief system or participate in organized activities conducted under the auspices of a religious denomination, church, or other religious or spiritual organization if both of the following apply:

1. The student's sincerely held religious belief or practice severely affects the student's ability to take an examination or meet an academic requirement. 2. Not later than fourteen (14) days after the first day of instruction in a particular course, the student provides the instructor with written notice of the specific dates for which the student requests alternative accommodations.
B. The instructor shall accept without question the sincerity of a student's religious or spiritual belief system.
C. The instructor shall keep requests for alternative accommodations confidential. However, in accordance with the Family Educational Rights and Privacy Act, 20 U.S.C. 1232g, 34 C.F.R. Part 99, this requirement of confidentiality does not prevent the disclosure of records and information about any request for accommodations among Sinclair officials who have a legitimate educational interest in that information.
D. The instructor shall schedule a time and date for an alternative examination or assignment, which may be before or after the time and date the examination or other academic requirement was originally scheduled, but shall do so without prejudicial effect.
E. For a course that includes clinical experience, internship, or other supervised activities outside the classroom, the instructor of the course and/or the academic department chair or program coordinator or other Sinclair employee involved in the outside activity, will assist as needed in communicating and coordinating with the outside preceptor, supervisor, or other persons involved in scheduling or supervising the student's outside activities to provide accommodations under this Policy.

## V. STUDENT GRIEVANCE PROCEDURE

A. A student who has a grievance with regard to Sinclair's implementation of this Policy may submit a complaint using the Academic Complaint Form available on Sinclair's website at https://www.sinclair.edu/services/help/complaint/ under "Academic Concerns."
B. The complaint must include the following information:

Student's Name
Student's Tartan ID Number
Course Name and Number and Section Number

Instructor's Name
Copies of any written communications or records about the accommodation request and the substance of the student's complaint.
C. The complaint will be forwarded to the Associate Provost, who will notify the Provost of each complaint received. The Provost may designate a Sinclair employee other than the Associate Provost or an outside consultant to review the complaint.
D. The Associate Provost or other person designated to review the complaint will communicate with the student, the instructor, and others who may have relevant information about the request for accommodation and the issues stated in the complaint.
E. The student, the instructor, and any other Sinclair employees shall cooperate with and respond promptly to the Associate Provost or other person designated to review the complaint.
F. The Associate Provost or other person designated to review the complaint will communicate the results of the review to the student in writing.
G. The results of the review of a complaint may include a requirement that the instructor provide accommodations to the student, including but not limited to opportunities or extensions of time for completion of exams or coursework, adjustment(s) in grade(s) (to be made in consultation with the instructor and the Chair of the Department of the course(s) at issue in the complaint), or such other accommodations that the Associate Provost deems appropriate.

## VI. LIST OF MAJOR RELIGIOUS HOLIDAYS

A. Sinclair will post both of the following in a prominent location on the Sinclair web site:

1. A copy of this Policy;
2. A nonexhaustive list of major religious holidays or festivals for the next two academic years.
B. The nonexhaustive list of major religious holidays will be based on the list provided by the chancellor of higher education to each state institution of higher education and may include additional holidays designated by Sinclair's President.
C. Each time the list is posted, printed, or published it shall include a statement that the list is nonexhaustive.
D. The list may not be used to deny accommodation to a student for a holiday or festival of the student's faith or religious or spiritual belief system that does not appear on the list.
E. No inclusion or exclusion of a religious holiday or festival on the list posted by Sinclair, shall preclude a student from full and reasonable accommodations for any sincerely held religious beliefs and practices with regard to all examinations or other academic requirements and absences for reasons of faith or religious or spiritual belief system provided under this section.

## VII. AMENDMENT OF POLICY

Sinclair's President may amend this Policy as the President deems appropriate, so long as the Policy maintains all of the elements required by Ohio Revised Code Section 3345.026. If any amendment is made, the President shall provide a copy of the amended Policy to the Board of Trustees, cause it to be posted on Sinclair's website, and communicate it to faculty and other employees involved in the administration of the Policy.

## The Tartan Card (Student I.D.)

The Tartan Card, proof of student status, is required to use college services or participate in college sponsored activities. The card electronically stores information about the students' enrollment status. To get the first Tartan Card at no charge, present a term statement and another photo I.D.to Registration and Student Records, the Dayton Campus Welcome Center (First Floor, Building 10) or at
any regional centers. Card readers located on Sinclair campuses scan the information and provide access for such transactions as checking out materials in the Library and using the Physical Activity Center (PAC).

There is a $\$ 5$ replacement fee for damaged, lost, or stolen cards.

## Transcripts

For official transcripts of academic work completed at Sinclair, choose from these methods:

- Online -- For the quickest way to order transcripts, visit
www.sinclair.edu/transcripts Transcripts ordered online will be produced and sent in one to two (1-2) business days
- Mail -- Mail the transcript request found on the Sinclair web page to the Registration \& Student Records office. Include the student I.D. number, birth date, the term last attended at Sinclair, legal signature, daytime telephone number, and payment. Cost is $\$ 5.00$ per mailed transcript. Transcripts ordered by mail will be produced and mailed in five business days.
- Payment for transcripts can also be made at the Bursar Office or at any of the regional centers.
- A financial hold on your student account will prevent you from receiving transcripts (with the exception of sending to employer or potential employer).


## Tobacco and Tobacco-Related Products Restrictions Policy

## Policy Statement

Smoking and the use of any smokeless tobacco products, electronic cigarettes or products intended to mimic tobacco products are prohibited on any property owned, leased or controlled by Sinclair Community College.

This policy does not prohibit the use of nicotine patches, pills, gum or other products specifically designed to assist individuals with the cessation of smoking or tobacco use.

## Scope

This policy applies to all Sinclair employees, Sinclair students, and visitors to Sinclair facilities.

## Enforcement

This policy will be enforced by Sinclair police officers and security officers.

Employees or students who violate this policy may be subject to discipline under applicable college policies or procedures.

Visitors who violate this policy may be required to leave the property and/or be issued a notice of trespass.

## Responsibility

Employees, students and visitors shall be knowledgeable of this policy and adhere to its provisions.

## References

- Ohio Revised Code 3794.01-3794.09
- Policy originally approved by Board of Trustees - December 12, 1995
- Revised: December 2008; November 2013
- Revised by Board of Trustees - June 24, 2016; revisions effective January 1, 2017


## Waitlisting

An upgrade to registration allows students to electronically "wait in line" for the next available seat. As a vacancy becomes available, the next students on the waiting list will be automatically registered for the section. The students will then be notified via their my.sinclair.edu email address that they have been registered for the course section.

By placing his or her name on the waiting list a student is agreeing that he or she is financially obligated to pay for the courses. Tuition must be paid and follow the tuition payment schedule at: my.sinclair.edu

Students will be able to add themselves to the waitlists up through 5:00 p.m. on the Monday of late registration. For the current term's drop and withdraw dates, visit: www.sinclair.edu/services/registration/dates

For more information visit: www.sinclair.edu/services/registration

## Accreditation and State Authorization

## Accreditation

Sinclair is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1411, (800) 6217440, (312) 263-0456, FAX (312) 263-7462, email: info@hlcommission.org. Sinclair is also a member of the Ohio Association of Community Colleges. Programs of study are approved by the Ohio Department of Higher Education. Sinclair is authorized to grant associate degrees in arts, sciences, applied science, individualized and technical study as well as specific bachelor's degrees.

To review a list of the associations, agencies, and/or governmental bodies that accredit, approve, or license the college's programs, check www.sinclair.edu/accrediting-agencies

The official documents for the associations, agencies, and/or governmental bodies that accredit, approve, or license the school and its programs are housed in the office of the Provost, Building 7, Room 7330. In order to receive a copy for review, go to this office. For additional and specific details regarding program accreditations, approvals or licensures, see the individual program descriptions in this catalog. Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460.

## State Authorization

State Authorization regulations determined by the Department of Education dictate the educational activities Sinclair Community College is permitted to offer outside of Ohio. Sinclair must comply with each state's requirements regarding legal authorization for
participation in internships, clinical placements, or co-ops and the delivery of online degrees, programs, and courses.

Students impacted include:

- Students located outside of Ohio and are interested in taking online courses at Sinclair
- Students who plan to participate in a Sinclair approved field placement outside of Ohio
- Students who physically relocate to any other state or territory during their enrollment at Sinclair
Sinclair Community College is a member of the State Authorization Reciprocity Agreement (SARA) which provides authorization to offer certain activities in other SARA member states.

More information about SARA authorized states and out of state grievance procedures is available to students and can be found at Sinclair's State Authorization page.

## Campus Security Report and Non-Discriminatory Practices

## Campus Security Report (Campus Security Act of 1990)

The federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act requires Sinclair Community College provide an annual security report to include statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings owned or controlled by Sinclair Community College; and on public property within, or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, emergency response and evacuation procedures, the reporting of crimes, sexual assault, a statement of the enforcement authority of campus security personnel, and other matters. The public may obtain a copy of the report by contacting the Sinclair Department of Public Safety at (937) 512-2700 or www.sinclair.edu/police

You may also review the report (and reports for previous years) at www.sinclair.edu/services/conduct-safety/public-safety/annual-safetyreports/

## Non-Discriminatory Practices

Sinclair has an Equal Opportunity/Non-Discrimination Policy, which states as follows:

Sinclair Community College is strongly committed to a policy of equal opportunity in its employment practices, educational programs and activities, and the many services it offers to the community. The college does not discriminate against applicants, employees or students on the basis of race, color, creed, religion, age, sex, sexual orientation, gender identity, marital status, veteran status, national origin, ancestry, citizenship or disability.

Sinclair has other policies which prohibit discrimination of various types as required by law, including Title VI (discrimination on the basis of race, color, or national origin by recipients of federal financial assistance); Title VII (discrimination on the basis of race, color, or
national origin in employment); Title IX (discrimination on the basis of sex in education programs or activities); Americans with Disabilities Act (ADA, as amended) and Section 504 (discrimination on the basis of disability); and ADEA (discrimination on the basis of age).

Inquiries concerning Sinclair's non-discrimination practices or complaints of discrimination should be referred to the following offices:

Equal Opportunity Officer Room 7-340
hrdept@sinclair.edu • (937) 512-2514 (Employee matters)
Accessibility Services Office Room 10-424
(937) 512-3400•Email: accessibility@sinclair.edu
(937) 512-5113 • (937) 701-6784 (public videophone) (Student matters)

Chief Diversity Officer Room 12-220
Michael Carter • (937) 512-3883 (Student or Employee matters)
Title IX Office Room 7-342
TitleIX@sinclair.edu •(937) 512-2961 (Student or Employee matters)

## ADA/504 Coordinator

Students and visitors: lorrie.spivey@sinclair.edu • (937) 512-3400
Employees: stephanie.caracappa@sinclair.edu • (937) 512-5193
Vice President for Equity and Antiracism Room 12-221
Janet Jones • (937) 512-3890 (Student or Employee matters)

## How to Begin

- Degree/Certificate Seeking Students
- Non-Degree Seeking Student


## Degree/Certificate Seeking Students

Ready to get started at Sinclair? Follow the steps below to find out how to begin your degree or certificate. All steps can be completed at any Sinclair location! For more information, visit
www.sinclair.edu/getstarted

## Apply for Admission

Complete your application at www.sinclair.edu/applynow

## Apply for Financial Aid

File the Free Application for Federal Student Aid (FAFSA) at studentaid.gov Use Sinclair's school code: 003119

## Visit Campus or Connect with an Admissions Counselor

Learn more about the exceptional programs offered at Sinclair, discover your next steps to enrollment, and explore campus during a tour. Schedule your visit at www.sinclair.edu/visit

## Check your Sinclair Email

Visit my.sinclair.edu to check your email often. This is where you will receive important updates about registration and financial aid.

## Determine your Course Placement

Speak with an Admissions Counselor or Enrollment Specialist to make sure you get started in the right math and English courses. They will help you determine if you need to take a placement test.

## Meet with an Academic Advisor

Meet with your Academic Advisor to develop your academic plan (MAP). This is also a great time to discuss prior learning assessment options (e.g., CLEP, AP, portfolio-based). Visit www.sinclair.edu/advising to learn more.

## Complete How to Succeed in eLearn

Learn how to navigate Sinclair's learning management system, eLearn, which is used in many of our classes. Completing How to Succeed in eLearn is required before you can register for classes. Learn more or get started by visiting www.sinclair.edu/hts

## Register for Classes

Register for classes at my.sinclair.edu

## Attend New Student Orientation

Learn more about orientation at www.sinclair.edu/orientation

## Pay your Tuition and Fees

Make your payment at my.sinclair.edu or learn more about payment options at www.sinclair.edu/bursar

## Buy your Books Online

## Order your books at sinclair.ecampus.com

Questions? Contact Admissions at admissions@sinclair.edu or (937) 512-3675

## Non-Degree Seeking Student

Ready to take classes at Sinclair? Follow the steps below to find out how to register for classes for the first time. All steps can be completed at any Sinclair location! For more information, visit www.sinclair.edu/getstarted

## Apply for Admission

## Complete your application at www.sinclair.edu/applynow

## Check your Sinclair Email

Visit my.sinclair.edu to check your email often. This is where you will receive important updates about registration.

## Select your Courses

Visit the Registration Portal at regportal.sinclair.edu to select the courses you plan to take.

If the Sinclair course(s) you plan to take does not have perquisite course requirements and course registration for your desired term is available, you can register for your classes.

If the Sinclair course(s) you plan to take requires prerequisite course work complete the following steps:

- Revisit your Application Portal at www.sinclair.edu/apply
- Upload a copy of the Course Selection Form found at www.sinclair.edu/visiting
- Upload documentation that indicates you meet the required prerequisites, be sure these documents include your name and the name of the college/university where the credit was earned. Typical documentation types include:
- Unofficial Transcripts
- Degree Audit Reports
- Advising Reports

Other documents may be used for course placement in math and English if you have not previously earned college credit. If you graduated high school in the last three years you can upload a copy of your final high school transcript. You can also send a copy of an ACT or SAT score report if the test was taken in the last two years to help determine placement.

## Complete How to Succeed in eLearn

Learn how to navigate Sinclair's learning management system, eLearn, which is used in many of our classes. Completing How to Succeed in eLearn is required before you can register for classes. Learn more or get started by visiting www.sinclair.edu/hts

## Register for Classes

Register for classes at regportal.sinclair.edu

Pay your Tuition and Fees
Make your payment at my.sinclair.edu

## Buy your Books Online

Order your books at sinclair.ecampus.com

## Important Numbers

All numbers are area code 937 unless otherwise noted.

## College Services

Academic Advising 512-3700
Accessibility Services 512-5113
Alumni Affairs 512-3330

Bursar/Cashier 512-2606
Campus Store 512-2665 College Credit Plus 512-5266
College for Lifelong Learning 512-2372
Computer Labs

- EDU Lab 512-2787
- Library IT Lab 512-2002

Early Childhood Education Center 512-2234
Food Service/Tartan Marketplace 512-2501
Help Desk 512-4357 (HELP)
Human Resources 512-2514
International Education 512-4606
Library 512-2855
Military Family Education Center (MFEC) 512-2586
Multifaith Campus Ministry 512-2768
Ombudsman Solution Center 512-2205
Parking Information 512-2397
Physical Activity Center 512-2860
Student \& Community Engagement 512-2509
Student Employment 512-2781
Student Affairs 512-2291
Student Support Services 512-3550
Tech Prep 512-5146
Testing Center 512-3000
Tutoring \& Learning Center 512-2792
Workforce Development 512-9787

## Regional Locations

## Dayton

444 West Third Street, Dayton, Ohio 45402-1460(937) 512-3000

## Centerville

5800 Clyo Road, Centerville, Ohio 45459(937) 512-2363

## Englewood

1150 West National Road, Englewood, Ohio 45315(937) 836-8750

## Huber Heights

7301 Shull Road, Huber Heights, Ohio 45424 (937) 233-5550

## Mason

5386 Courseview Drive, Mason, Ohio 45040(513) 339-1212

## Wright-Patterson Air Force Base

2130 Fifth Street • Bldg 50, Area B, WPAFB, Ohio 45433(937) 5122586

## SinclairOnline

online@sinclair.edu•www.sinclair.edu/online
(937) 512-2990 • 1-888-226-2457 (toll-free)

## Academic Departments

ASL Interpreter Education Program 512-2722

Accounting 512-2615
Allied Health Instruction 512-3285
Architectural Technology 512-2183
Art 512-5381

Associate of Technical Study/ 512-3198
Associate of Individualized Study
Astronomy 512-3047
Athletics \& Sports Information 512-2860
Automation \& Control Technology 512-2570
Automotive Technology 512-3242
Aviation Technology 512-2570
Biology 512-2747
Business Information Systems 512-2168
Business \& Public Services 512-2917
Chemistry 512-2890
Clinical Laboratory Technology 512-3285
Civil Engineering Technology 512-2183
Clarion Newspaper 512-2744
Communication 512-2271
Computer Aided Manufacturing 512-2570
Computer Information Systems 512-2892
Construction Management Technology 512-2183
Criminal Justice 512-2876
Dance 512-4580

Dental Health Sciences 512-2779
Design 512-4505
Developmental Language Arts 512-2701

Developmental Mathematics 512-4463
Dietetics \& Nutrition 512-2756
Economics 512-2615
Education 512-2722
eLearning Division 512-2354
Electronics Engineering Technology 512-2570
Emergency Medical Services 512-5338
Energy Management Technology 512-2183
Engineering Technology Design 512-2183
Engineering University Transfer 512-2918
English 512-3078
Entrepreneurship 512-2615
Environmental Engineering Technology 512-2183
Exercise Science 512-3285
Financial Management 512-2615
Fire Science Technology 512-3242
Geography 512-2944
Geology 512-2890
Government 512-2844
Health Information Management 512-2973
Health Sciences 512-2919
HVACR Engineering Technology 512-2183

Honors 512-4331
Hospitality Management/Tourism 512-2014
Human Services \& Behavioral Health 512-2845
Humanities 512-2844
Law 512-2616
Liberal Arts, Communication \& Social Sciences 512-2881
Management 512-2615
Marketing 512-2566
Mathematics 512-2767
Mechanical Engineering Technology 512-2183
Medical Assistant Technology 512-3285
Modern Languages 512-2844

Music 512-4580

Nursing 512-2848
Occupational Therapy Assistant 512-5177
Operations Technology 512-2570
Paralegal 512-2616
Phi Theta Kappa 512-2517
Physical Therapist Assistant 512-5355
Physics 512-3047
Political Science 512-2844

Psychology 512-2889 Radiologic Technology 512-2268
Real Estate 512-2616
Respiratory Care 512-2268
Science, Mathematics \& Engineering 512-2918
Service Learning 512-2040
Sociology 512-2944
Social Work 512-2944

Sport and Recreation Education 512-2722
Surgical Technology 512-2563
Theatre 512-4580
Veterinary Technology 512-2563

## Other Student Resources

Accessibility Services Building 10, Fourth Floor
(937) 512-3032 (Counseling)
(937) 512-5113 (Disability Voice)
(937) 701-6784 (Disability VP)
www.sinclair.edu/accessibility

## Campus Store

Building 7, First Floor
(937) 512-2506 • http://bookstore.sinclair.edu

Military Family Education Center (MFEC)
Building 10, Room 10444
(937) 512-2586 • www.sinclair.edu/mfec

Multifaith Campus Ministry
Building 10, Room 10443
(937) 512-2481 • www.sinclair.edu/campus-ministry

Ombudsman Solution Center
Building 10, Room 10424
(937) 512-2205 • www.sinclair.edu/ombudsman

Public Safety
Building 7, Room 7112
(937) 512-2700 • www.sinclair.edu/police

## Student \& Community Engagement

## Building 8, Room 8025

(937) 512-2509 • www.sinclair.edu/engagement

## Student Support Services <br> Building 10, Room 10421

(937) 512-3550 • www.sinclair.edu/support/sss

## Tutorial Services <br> Building 7, Room 7L07

(937) 512-2792 • www.sinclair.edu/tutorial-services

## Published Program Length

The chart below represents the amount of classroom time that each program will take to complete. For example, a 24 credit hour short-term certificate will take a student going full-time, two semesters to complete. Following Sinclair's academic year, two semesters is equivalent to 1 academic year, 9 months or 32 weeks.

| CREDIT <br> HOURS IN <br> PROGRAM | YEARS | MONTHS | WEEKS |
| :--- | :---: | :---: | :---: |
| 12 or less | .5 | 5 | 16 |
| 13 to 24 | 1.0 | 9 | 32 |
| 25 to 36 | 2.0 | 18 | 64 |
| 37 | 2.5 | 23 | 80 |
| 60 | 3.0 | 27 | 96 |
| 61 to 73 |  |  | 48 |

Years were calculated based on (credit hours $\div 12$ ) $\div 2$ because there are 2 terms per year in the academic calendar.

Months were calculated based on years $x 9$ months because budgets for an academic year are based on 9 months.

Weeks were calculated based on the number of terms in a year x 16 weeks.

## Student Services and Support

## www.sinclair.edu/services

Sinclair provides access to academic support services, programs and resources that proactively and collaboratively guide, assist, and help students achieve their personal learning goals.

Visit www.sinclair.edu/services and www.sinclair.edu/studentlife/wellness/resources for more information.

- Academic Advising Center
- Academic Departments
- Academic Division
- Academic Testing
- Accessibility Services
- Admissions
- African American Male Initiative (AAMI)
- Alerts: Campus Closing Information
- Alumni Resources
- Appalachian Outreach
- Biology Self Instruction Service B.I.O.S.I.S
- Books by eCampus
- Bursar College Cashier
- Business Information Systems (BIS) Lab
- Campus Life
- Campus Store
- Campus Visits (Tour Campus)
- Career \& Transfer Fairs
- Career Advising \& Exploration
- Career Communities
- Career Development \& Employment Assistance
- CCAMPIS (Child Care Access Means Parents in School)
- Chemistry Resource Center
- College Credit Plus (CCP)
- College for Lifelong Learning
- Computer Access (Computer Labs)
- Counseling Services
- Course Catalog
- Dental Hygiene Clinic
- Discount RTA Bus Passes
- Displaced Worker Services
- DMV Disability Plates/Placards
- eLearning Division
- Email (Office365)
- Employee Directory
- FAFSA Workshops (Financial Aid)
- English as a Second Language (ESL)
- Fast Forward Re-engagement Center
- Fee \& Tuition Schedule
- Financial Aid \& Scholarships
- Financial Aid Portal
- Financial Aid TV
- FlexPace Online Courses
- Focus 2
- Geology Resource Center (GRC)
- Greene CATS Public Transit
- Greene County Board of Developmental Disabilities (GCBDD)
- Help Desk (Information Technology Support)
- Honors Program
- How to Succeed Online Tutorial
- International Education
- Internships \&Apprenticeships (Office of Work-based Learning)
- IT Documentation (Students)
- JobLink
- Kappa Beta Delta Honor Society
- LGTBQ+ Support
- Library
- Louis Stokes Alliance for Minority Participation (LSAMP) Program
- Mathematics Lab
- Military Family Education Center/ Veterans Services
- Mobile App
- Modern Languages Lab
- Multi-faith Campus Ministry
- My Academic Plan (MAP)
- My.Sinclair (Student Portal)
- Net Price Calculator
- New Student Orientation (NSO)
- Ohio Career Information Systems (OCIS)
- Ohio Transfer 36 (OT36) for Transferable Courses
- Ombudsman Solution Center
- Parking
- Payment Deadlines
- Phi Theta Kappa (PTK)
- Physical Activities Center (PAC)
- Physical Education Classes
- Physics Resource Lab
- Placement Testing
- Prior Learning Assessment (PLA)
- Project Lead the Way (PLTW)
- Public Safety (Sinclair Police)
- Registration \& Student Records
- Registration Calendar (Registration \& Student Records)
- Registration Portal
- SCC 1101 First Year Experience Class
- Scholarship Workshops
- Scholarships (Financial Aid \& Scholarships)
- Service Learning
- Sinclair Calendar (Events)
- Sinclair News
- Sinclair Policies
- Sinclair Talks (Student \& Community Engagement)
- SinclairOnline
- Sponsored Student Payment Information
- Student \& Community Engagement
- Student Affairs
- Student Clubs \& Organizations
- Student Employment (Financial Aid \& Scholarships)
- Student Enrichment Programs
- Student Judicial Affairs
- Student Lactation Rooms
- Student Support Services
- Study Abroad (International Education)
- Tartan Card (Student ID)
- Tartan Marketplace
- Taylor Scholars
- Tech Prep (MVTPC)
- Testing Center
- The Clarion (Student Newspaper)
- Think College
- Title IX Office
- Transfer Agreements
- Transfer Student Services
- Tuition Payment Plan
- Tutoring \& Learning Center (TLC)
- UD Sinclair Academy
- University Partnerships
- Upward Bound
- Web Accessibility Help
- Welcome Week
- Work Study (financial Aid)
- Wright Path Program
- Writing Lab
- YMCA Childcare (Englewood)
- YMCA Childcare (Huber Heights)
- Young Scholars Program


## Wright Path/UD Academy

## Wright Path Program Between Sinclair Community College and Wright State University

The Wright Path Program formalizes the partnership between Wright State University and Sinclair Community College and provides a seamless student transfer between the institutions. The objective is to facilitate student entry or reentry into a bachelor's degree program at Wright State University.

Goals of the Wright Path Program include:

- Eliminating barriers for students in attaining their educational goals
- Expanding housing options for all Sinclair Community College students.
- Providing accurate and current academic transfer pathways.
- Improving academic program articulation
- Using resources at both institutions efficiently and effectively Wright Path students who are using federal financial aid for housing charges contracted with Wright State University must complete an authorization form before federal financial aid can cover those charges.

For more information, visit www.sinclair.edu/wrightpath or contact Academic Advising: academicadvising@sinclair.edu or (937) 5123700.

## UD Sinclair Academy Between Sinclair Community College and the University of Dayton

Maximize your future by beginning your studies at Sinclair Community College and graduating with a degree from the University of Dayton (UD). The UD Sinclair Academy provides substantial UD benefits for Academy students while at Sinclair, as well as increased levels of merit- and need-based scholarships at UD. The result is a far more integrated $2+2$ model and a more accessible UD undergraduate degree.

As incoming first-year students at Sinclair, academy students will have access to:

- A University student ID card and email
- More than 240 student clubs
- Recreation facilities including complimentary RecPlex membership
- Athletic events, including basketball games
- Development of a University of Dayton co-curricular transcript and online e-portfolio
- Student Success coaching from UD during your transition
- Peer mentoring through the Office of Multicultural Affairs
- Speaking with your UD academic advisor for assigned major For more information, visit: www.udayton.edu/academy or contact Academic Advising: academicadvising@sinclair.edu or (937) 5123700.


[^0]:    * Tuition and fees of $\$ 146.03$ per credit hour includes an Instructional Fee of $\$ 124.78$, General and Technology Fee of $\$ 14.25$, and Career Services Fee of \$7.00

    Sinclair is one of the very few community colleges in Ohio that has the distinction of being funded by a local county levy. The Montgomery County tax levy provides tuition discounts for students who live inside Montgomery County. Per State law, only Montgomery County students are eligible for this lower rate.

