## SOUTHWESTERN MICHIGAN COLLEGE



## COLLEGE CATALOG

 2020-2021Southwestern Michigan College College Catalog 2020-2021
Every effort has been made to ensure the information in this catalog is accurate at the time of publication. The college is a dynamic institution and strives to maintain currency; therefore, the information in this catalog is subject to change.
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## Academic Calendar for 2020-2021

## Fall 2020 Semester

Tuesday, September 8
Tuesday, September 15
Monday, October 19

Monday, October 26
Tuesday, October 27
Wednesday, October 28
Wednesday-Friday, November 25-27
Monday, November 30
Monday, December 7

Tuesday, December 15
Wednesday-Friday, December 16-18
Friday, December 18

## Spring 2021 Semester

Monday, January 25
Monday, February 1
Friday, March 5

Friday, March 12
Monday, March 15
Tuesday, March 16
Friday, April 2
Monday-Friday, April 5-9
Monday, April 12
Monday, May 3

Friday, May 14
Saturday, May 15

## Summer 2021 Semester

Monday, June 7
Friday, June 11
Monday, July 5
Friday, July 30

Monday-Wednesday, August 9-11
Wednesday, August 11

Fall Classes Begin
Last Day to Add or Drop Semester-length and Early End Classes
Last Day to Withdraw from Early End Classes (please be aware that hybrid courses may have an earlier withdraw date)
Early End Classes End
Midsemester Classes Begin
Last Day to Add or Drop Mid Semester Classes
No Classes - Thanksgiving Break
Classes Resume
Last Day to Withdraw from Semester-length and Mid Semester Classes (please be aware that hybrid courses may have an earlier withdraw date)
No Classes - Prep Day for Final Exams - Tuesday Evening Exams Begin
Final Examinations
Fall Semester Ends

Spring Classes Begin
Last Day to Add or Drop Semester-length or Early End Classes
Last Day to Withdraw from Early End Classes (please be aware that hybrid courses may have an earlier withdraw date)
Early End Classes End
Midsemester Classes Begin
Last Day to Add or Drop Mid Semester Classes
No Classes - College Closed - Good Friday
No Classes - Spring Break
Classes Resume
Last Day to Withdraw from Semester-length and Mid Semester Classes (please be aware that hybrid courses may have an earlier withdraw date)
Spring Semester Ends
Commencement

Summer Classes Begin
Last Day to Add or Drop Classes
No Classes - Recognition of Independence Day
Last Day to Withdraw from Classes (please be aware that hybrid courses may have an
earlier withdraw date)
Final Examinations
Summer Semester Ends



## About Southwestern Michigan College

## The Purpose of a College Catalog

The purpose of a college catalog is to be of use to present or potential students and family members, to serve as a historical document, to describe the nature and scope of programs available, to prepare students with the tools and resources for academic success, and to outline the policies that govern a student's education. Every effort has been made to ensure accuracy at the time of publication.

Students have the responsibility to become familiar with catalog content as they pursue their educational goals. The administration, faculty, and staff share in the responsibility to abide by the content of these pages and make learning come alive to students. The catalog should be used as a guide in conjunction with the student's program planning tools and academic advisor to ensure that the necessary requirements are met for graduation.

The college reserves the right to change any part of the catalog and to make any changes retroactive for students currently enrolled. References throughout the catalog to SMC are references to Southwestern Michigan College. Items not specifically addressed in this catalog may be covered in department, program, or school handbooks. Those resources are not designed to supersede the content published in this catalog, but when items are not found in this catalog, those handbooks should be referred to and followed.

## History

SMC was founded on November 19, 1964. The voters of Cass County, Michigan approved a 1.5 million dollar tax levy to fund a local community college, and in September of 1965 ground was broken for the main campus in Dowagiac. From these beginnings, SMC has dedicated itself to making quality education available to all.

## Mission Statement

The mission of Southwestern Michigan College is to serve our community by providing affordable, local access to high-quality postsecondary career preparation and college education-including the total college-life experience.

## Core Values

The core values of Southwestern Michigan College describe the beliefs that direct the college in all that it does.

1. "Excellence with a Personal Touch" is a working principle guiding our actions.
2. High quality is inherent in all that Southwestern Michigan College does.
3. We have a commitment to be responsible managers of college resources: of human resources by promoting growth, satisfaction and empowerment; of financial resources by operating with a balanced budget and investing in the future; and of physical resources by maintaining a high-quality physical plant.
4. We believe in knowledge for all. As the only institution of higher education in the district, Southwestern Michigan College has the dual responsibilities of providing postsecondary career preparation for those who are seeking immediate employment and providing college coursework and degrees for those seeking baccalaureate degrees.
5. We have a commitment to being a learner-centered college, developing students through a total college-life experience and providing them with $21^{\text {stt}}$-century services.

## Accreditation

Southwestern Michigan College is accredited by the Higher Learning Commission (hlcommission.org), a regional accreditation agency recognized by the U.S. Department of Education.

Higher Learning Commission
230 South LaSalle Street, Suite 7-500
Chicago, Illinois 60604-1411
https://www.hlcommission.org

Southwestern Michigan College is also a member of the American Association of Community Colleges.
AACC
One Dupont Circle, NW, Suite 700
Washington, DC 20036
https://www.aacc.nche.edu
The Associate in Applied Science in Health Information Technology program at Southwestern Michigan College is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Commission on Accreditation for Health Informatics and Information Management Education
200 East Randolph Street, Suite 5100
Chicago, IL 60601
https://www.cahiim.org
The Associate in Applied Science in Nursing program at Southwestern Michigan College is accredited by the Accreditation Commission for Education in Nursing (ACEN).

Accreditation Commission for Education in Nursing
3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326
https://www.acenursing.org
The Automotive Technology program is accredited by the National Institute for Automotive Excellence (ASE).
National Institute for Automotive Excellence
1503 Edwards Ferry Rd., NE, Suite 401
Leesburg, VA 20176
https://www.ase.com

## Administrative Leadership and Deans

There are so many wonderful people at SMC who will teach, guide, encourage, mentor, and support students through their educational journey. Here is a list of just a few of them, our leadership team:

- Dr. Joseph Odenwald, President
- Dr. David Fleming, Vice President of Instruction
- Ms. Susan Coulston, Vice President and Chief Business Officer
- Mr. Michael O’Brien, Vice President of Enrollment and Student Development
- Dr. Keith Howell, Dean, School of Arts and Sciences
- Dr. David Fleming, Interim Dean, School of Business and Advanced Technology
- Dr. Melissa Kennedy, Dean, School of Nursing and Health Services
- Mr. Brent Brewer, Chief of Staff
- Mr. Jason Smith, Executive Director, Niles Campus
- Ms. Katie Hannah, Dean of Student Development
- Mr. Jeff Hooks, Executive Director of Campus Life


## Equal Opportunity Policy

Southwestern Michigan College is committed to a policy of equal opportunity for students, faculty, and staff. The college complies with all federal laws and regulations prohibiting discrimination including Title VI, Title IX, Section 504, Title II of the Americans with Disabilities Act, and with all requirements and regulations of the U.S. Department of Education. SMC does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. For inquiries regarding this policy and for all discrimination complaints, contact Brent Brewer, Chief of Staff, David C. Briegel Building, Room 2104, 58900 Cherry Grove Road, Dowagiac, MI 49047, 269-782-1276, bbrewer01@swmich.edu. For further information on the notice of non-discrimination, visit the Office for Civil Rights website for the address and phone number of the office that serves your area or call 1-800-421-3481.

## Services for Students

## Student ID Cards

Student ID cards are used for many things at SMC. They are available for all registered students and are mandatory to access the Student Activity Center. In addition, the student ID card serves as a library card. The card must be activated in order to check out books and materials. A student ID card may be obtained at the Office of First Year Experience on the Dowagiac campus or the Student Service Center on the Niles Campus. This card should be carried at all times. The card is needed when using campus printing and gaining access to residence halls and rooms for residence life students. A replacement fee of $\$ 15$ is charged for all lost or damaged cards.

## Student Employment

Many students enjoy having a job on the SMC campus and contribute to the success of the school. Two part-time on-campus student employment programs are in operation at SMC. The Federal Work-Study Program is supported through government funds and provides part-time campus jobs to eligible students. In addition, there are a limited number of regular campus jobs that are available for students. To browse and apply for student jobs, visit swmich.peopleadmin.com.

## Testing Center

The Testing Centers in the Briegel Building on the Dowagiac campus and on the Niles Campus get students started in the right courses for their present educational level. Please review the testing policies and procedures below. If you have questions about testing, contact the Testing Center at 269-782-1462.

## Placement Testing

New degree- or certificate-seeking students admitted to the college are required to complete placement testing before registering for classes. Non-degree-seeking students may also be required to test for prerequisite or placement purposes. Accuplacer placement tests are available in reading, writing, and math. ACT, SAT, or other standardized test scores may be sufficient for placement testing. Placement test results are issued for course placement and, in some cases, for program requirements. Testing is free, requires a photo ID, and is offered on a walk-in basis in the Testing Center on both the Dowagiac and Niles campuses. Students requiring disability accommodations for testing should contact Disability Services at 269-782-1303.

## Placement Retesting

Students may retest one time in each subject during the first term; however, once the drop/add period has passed, students may not retest to modify their schedule for that term. Same-day retesting is not permitted, and placement is based on the highest score. Accuplacer, SAT, and ACT reading and writing scores are valid for five years; math scores are valid for two years. If more than a year has passed since testing, and a student has not started a course sequence in that area, a student may retest once in appropriate testing subjects. Any exceptions must be approved by the appropriate Department Chair and the Testing Center Manager.

## Achieved Credit by Examination (ACE)

Achieved Credit by Examination, or ACE, is one way to earn credit for some SMC courses. ACE tests are written by SMC faculty and reflect the content taught in courses, similar to a comprehensive final exam. Credit achieved through ACE testing might not be transferable to other institutions. Students who plan to transfer to another college should contact that institution and inquire whether ACE credits are accepted there. Course objectives, score requirements, and other specifications are located in the Testing Center and the Fred L. Mathews Library. To be eligible to take an ACE test, students must have an application for admission on file with SMC and present a valid picture ID at the time of testing. Each test can be taken one time only and has a non-refundable fee of $\$ 50.00$ to be paid via cash or check in the Testing Center at the time of testing. Test results may take up to four weeks.

## Subject Assessment Tests

There are Subject Assessment Tests which allow students to test out of a basic-level course. The exams are not for credit but will allow students to take the next level course in sequence. There is no fee for the first test. One retest is allowed, with a fee of $\$ 20.00$. Contact the Testing Center for available Subject Assessment Tests.

## Competency Exams

Two Competency Exams (Keyboarding and Formatting) allow students to test out of a basic-level course. The exams determine proficiency and are not for credit. There is no charge to take these exams the first time. You may retest once after 30 days for a fee of $\$ 20.00$ each. Contact the Testing Center for available Competency Exams.

## College-Level Examination Program (CLEP)

SMC offers CLEP testing by appointment for a fee, with an additional $\$ 20$ proctor fee at the time of testing. Information regarding available tests and SMC equivalencies are found in the Testing Center. Prior to sending scores to another institution, students should contact that institution and discuss whether they accept CLEP exams for credit. Registration must be completed at clep.collegeboard.org. For more information contact the Testing Center, 1103 David C. Briegel Building on the Dowagiac Campus or Room 141 on the Niles Campus, 269-782-1347.

## Student Advising

First-time degree- or certificate-seeking students admitted to the college must sign up for their classes with guidance from a firstyear advisor in the Office of First Year Experience. During this session, students will discuss degree requirements and program options and create a schedule of classes for the upcoming term. After a student has completed their first year, they will be directed to the Academic Advising and Resource Center for continued advising. The advisors in the Academic Advising and Resource Center will further discuss degree requirements and proper course selection and ensure that students are on track toward graduation and/or for transfer to the four-year college or university of their choosing.

## The Honors Program

The Honors Program was designed to give high-achieving students the opportunity for advanced study in their chosen curriculum with one-on-one guidance from experienced faculty. Students who participate in the Honors Program prove that they have the aptitude and determination to perform above and beyond the call of duty and are highly attractive to employers and major universities. Students interested in the Honors Program at SMC should review the admission criteria, application procedures, and expectations at https://www.swmich.edu/honors.

## TRIO Student Support Services (TRIO SSS)

SMC offers additional academic advising resources to students through a federally funded program called TRIO Student Support Services. TRIO SSS is a Title IV National TRIO Program of the US Department of Education. Students eligible to participate in the TRIO Program have access to additional academic and personal resources and activities geared towards fostering success. Students receive ongoing advising, career and personal counseling, tutoring, and opportunities to visit four-year transfer institutions. Scholarships for qualifying students are also available. For more information, contact the TRIO SSS office at 269-782-1312.

## Disability Services

SMC is committed to comply with Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990 (ADA). Disability Services provides SMC with resources, education and direct support services and accommodations to ensure that individuals with disabilities achieve equal access to all aspects of SMC. Students have the right to either disclose or not disclose a disability. If a student desires to receive academic accommodations, they must contact Disability Services for a confidential discussion on accommodations to reduce disability-related barriers. The process is collaborative and individualized. Students should visit the Academic Advising and Resource Center (AARC) on the Dowagiac campus or the Student Service Center on the Niles Campus to pick up a Disability Services Request Folder to begin the process. Documentation regarding the student's disability is requested at the time the student returns the completed folder and schedules an appointment with the Disability Services Coordinator. For more information, contact the AARC to speak with Disability Services at 269-782-1303.

## The Fred L. Mathews Library

The Fred L. Mathews Library is the college's primary resource for learning support. It is home to the Carol A. Tate Teaching and Learning Center, which offers free tutoring to students. The library offers scholarly and fiction books, eBooks, databases, magazines, DVDs, and CDs for students to rent for free. Students will find that the Fred L. Mathews Library is a place to unwind between classes, receive reference services, and study independently or in groups. The Carol A. Tate Teaching and Learning Center on the Niles Campus also offers free tutoring as well as library services, including the ability to send and receive materials between both campuses. For more information, contact the Fred L. Mathews Library at 269-782-1339.

## The Carol A. Tate Teaching and Learning Center

The Carol A. Tate Teaching and Learning Center offers free subject-specific tutoring and academic support for all SMC students both in person and online. It is located in the Fred L. Mathews Library on the Dowagiac campus and off the main commons area on the Niles Campus. The Carol A. Tate Teaching and Learning Center is also a computer lab and study space. It is a great place to work independently, in a study group, or with a learning consultant. Beyond subject-specific tutoring, they can also help with study skills, resumes, cover letters, using Moodle, and more. For more information, contact the Carol A. Tate Teaching and Learning Center at 269-782-1409.

## Bookstore

All required textbooks are available in the SMC bookstore located in the bookstore annex to the Dale A. Lyons Building on the Dowagiac campus. Class materials, computers, apparel and a variety of miscellaneous college items are also available, as well as digital and rentable textbooks. For more information, contact the bookstore at 269-782-1384 or visit the online store at https://www.shopsouthwestern.com.

## Niles Campus Student Services

Students who take courses on the SMC Niles Campus are afforded many of the same quality services as on the Dowagiac campus Such services include veterans advising, student advising, tutoring and writing assistance, testing, a fitness room, food options, and more.

## Records Office

The Records Office maintains all student academic records, including the processing of diplomas and graduation. Other services include name and address changes, course audit requests, transfer credit evaluations, as well as the processing of official and unofficial transcripts. Students and alumni can order transcripts online anytime at www.getmytranscript.com. This service allows for electronic processing and distribution of transcripts for employment, further schooling, or any other purpose. For more information about the Records Office and its services to SMC students, contact 269-782-1351.

## Campus Security

SMC is committed to ensuring the safety of students so that they can concentrate on their studies. To this end, the following measures are coordinated through the Campus Security office.

Each campus is patrolled by campus security and local law enforcement. The college also contracts with private security, the Dowagiac Department of Public Safety and the Cass County Sheriff's Offices to provide 24-hour protection and response for the college.

## Severe Weather Alerts

The National Weather Service has certified both of SMC's campuses as STORMREADY. This means that SMC has outstanding weather monitoring and reporting systems in place, including $24 / 7$ monitoring of National Weather Service alerts.

## Emergency Situations

Students and staff receive training throughout the year on various hazardous situations, including active violence training and severe weather and evacuation procedures. Each building has designated first responders for medical response and evacuation situations. Emergency procedures and contact information are posted in every room.

## Emergency Notification

The college uses outdoor sirens and the RAVE notification system to alert students and staff of emergency situations and campus closings. The RAVE system sends notifications via phone calls, text messages, emails and on-campus computer monitors. Students should update their emergency information by accessing swmich.edu/rave.

## Prevention

Campus safety is enhanced through a web of security features such as video cameras, emergency phones in each building, electronic door locks, and specialized lighting. The residence halls have additional security features including secured keycard entry into parking lots, residence halls, suites and bedrooms; a Resident Assistant on each floor; a Residence Hall Manager in each building available 24/7; and a front desk in each building where visitors must check in.

## Reporting and Emergencies

For emergencies, contact 911. An anonymous, non-emergency anonymous reporting system (swmich.edu/concerns) is also in place in order to identify concerning behaviors and incidents. Campus Security can also be contacted directly at 269-782-1234 or 269-7832194.

## Commencement

When a student is nearing the end of their program, they should plan ahead to participate in commencement. A commencement ceremony is held once each year in May. Students who finished their certificate or degree during the prior Fall Semester, as well as students who will finish their certificate or degree in the Spring Semester and upcoming Summer Semester are eligible to participate. To participate in commencement, students must complete two forms, the Application for Graduation form and the Register for

Commencement form, both of which are online. Failure to submit either of these documents by the posted deadline could result in not being able to walk in commencement.

## Getting Started with Southwestern Michigan College

## Apply for Admission

There is no cost to submit an application for admission to Southwestern Michigan College, and it only takes a few minutes to do so. Prospective students can complete the application online at https://swmich.edu/applynow or pick up an application at either the Dowagiac or Niles location. The SMC Dowagiac campus is located at 58900 Cherry Grove Road. The Niles Campus is located at 33890 U.S. Highway 12.

After submitting the application for admission, prospective students should submit their SAT or ACT scores, if they have taken either of these tests. More information about admission procedures and policies can be found online at https://www.swmich.edu/admissions.

## Attend a New Student Orientation

All new students are expected to attend a New Student Orientation. During orientation, new students will register for classes, learn about campus resources and how to succeed in their program, meet key staff including program deans and finish up last-minute business. Students will have the opportunity to tour campus and connect with other students. From placement tests to class registration and financial aid, a student can complete all necessary steps to get started at SMC.

## Send Transcripts and Make Payment

The final steps toward enrollment include sending an official high school transcript (with proof of graduation), sending transcripts from any colleges from which you wish to transfer credit to SMC, and paying the first semester balance. High school transcripts should be sent to the Admissions Office, 58900 Cherry Grove Road, Dowagiac, MI 49047. Students should send any other college transcripts to the SMC Records Office.

More information about the transfer of credit for coursework completed at regionally accredited post-secondary educational institutions, AP, CLEP, and military credit can be found online at https://www.swmich.edu/records.

To make payment for courses, students should contact or visit the Business Office located on the first floor of the Briegel Building on the Dowagiac campus or just inside the main entrance on the Niles Campus. Students can also call 269-782-1298 or email ecashier@swmich.edu. Payment plans are available. Bills are due August 1 for the Fall Semester, December 1 for the Spring Semester, and May 1 for the Summer Semester. For more information about payment options and policies, visit
https://swmich.edu/business-office.

## Applicants with a Criminal History or Disciplinary Record

Applicants answering affirmatively to questions about felony or misdemeanor charges on the application may be required to submit a non-refundable $\$ 50$ check or money order in order for SMC officials to conduct a criminal background check. The applicant may also be asked to provide written statements which will provide SMC officials with additional details of the nature of the offense(s). Interviews with college administrators may be scheduled in an effort to determine if the applicant should be granted admittance, receive deferred admittance, or be denied admission. A committee at SMC will make that determination. All information gathered will be kept on file and will be handled in a confidential manner. However, it should be noted that SMC reserves the right to notify the administration, faculty, and/or staff of the college, on a need-to-know basis, of the student's name and criminal and rehabilitative history. Please direct any questions you may have to the Director of Campus Security and Conduct.

## Applicants with International Credentials

Applicants who attended high school outside of the U.S. or wish to transfer college credits from international colleges and universities to SMC must have their international transcripts and credentials evaluated by an independent international credential evaluation service. All international credentials must be sent directly from the evaluation service in order to be considered official. Credential evaluation means converting foreign academic credentials into their U.S. equivalents. The service companies listed below produce individualized, written reports describing each certificate, diploma, or degree you have earned, including details of individual courses and credits, specifying the U.S. equivalents. SMC does not perform its own credit evaluations of international transcripts. One of the following services must complete the evaluation. It is important to request a "course-by-course" evaluation rather than a "document-by-document" evaluation. This enables SMC to transfer individual course credits.

## WES World Education Services

Secondary (high school) records: document-by-document evaluation required
Post-secondary (university) records: course-by-course evaluation required

WES World Education Service, Inc.
PO Box 745
Old Chelsea Station
New York, NY 10113-0745
Tel: 261-966-6311, 800-937-3895
Fax: 212-739-6100
https://www.wes.org
ECE Educational Credential Evaluators
Secondary (high school) records: general report required
Post-secondary (university) records: course-by-course report required
ECE Educational Credential Evaluators
PO Box 514070
Milwaukee, WI 53203-3470
Tel: 414-289-3400
https://www.ece.org
Note: If your documents are not issued in English, you are required to send precise and word-by-word translations to WES or ECE. If you do not send a copy of the translation, your records cannot be evaluated. A certified translation agency such as University Language Services is recommended.

## Guest College Students

Guest college students enroll in courses at SMC to transfer credits back to their home college or university for the purpose of degreecompletion at the home institution. Guest college students of SMC should be high school graduates with some college-level work previously finished.

Guest college students should complete an application for admission to SMC and be prepared to provide unofficial or official transcripts from their home institutions to demonstrate satisfaction of SMC prerequisites. An advisor specifically assigned to assist the needs of guest college students will help the student navigate registration and additional onboarding needs. It is the responsibility of the student to investigate the transferability of the SMC course back to the home institution.

Guest college students who consider remaining at SMC for consecutive semesters should speak with their advisor and will need to complete a new application for admission to formally declare the transition from guest to degree-seeking student at SMC. Guest college students should not remain in the "guest" status for more than one semester.

For more information about becoming a guest college student at SMC, contact 269-782-1499.

## The Dual Enrolled Student

Dual enrollment opportunities are available to students ages 14 and older who have not yet achieved a high school credential and who may obtain college credit by taking courses at Southwestern Michigan College. The following rules apply to these students.

## High School Sponsored

The Postsecondary Enrollment Options Act (PA 160 of 1996) provides for payment from a school district's state aid foundation grant for enrollment of certain eligible high school students in postsecondary courses of education. The bill establishes eligibility criteria for students, institutions, and courses; requires eligible charges (tuition, mandatory course or material fees, and registration fees) to be billed to a school district; establishes enrollment and credit requirements; requires school districts to provide counseling and information to eligible students and their parents; and requires intermediate school districts to report to the Department of Education.

## Eligibility

In order to meet eligibility requirements for dual enrollment, a student must:

- Be enrolled in at least one high school class in a school district, public school academy, or state-approved nonpublic school in Michigan,
- Not be a foreign exchange pupil enrolled under a cultural exchange program (J-1 Visa),
- Have at least one parent or legal guardian that is a resident of Michigan (unless the student is experiencing homelessness), and
- Not have been enrolled in high school for more than four school years (unless one of the exceptions provided for in administrative rule has been satisfied).


## Eligible Postsecondary Institution - 388.513(1)(e)

State universities, community colleges, or independent non-profit degree-granting colleges or universities located in Michigan that chooses to comply with the Postsecondary Enrollment Options Act are eligible.

## Eligible Course - 388.513(1)(d)

In order to be eligible for dual enrolled credit, a course must:

- Be offered by an eligible postsecondary institution for postsecondary credit,
- Not be offered by the eligible student's high school (or is not available to the student due to an unavoidable scheduling conflict),
- Be academic in nature [i.e., it normally applies toward the satisfaction of (postsecondary) degree requirements],
- Not ordinarily be taken as an activity course,
- Not be a hobby, craft, or recreational course,
- Be in a subject area other than physical education, theology, divinity, or religious education, and
- Not be required for computer science or foreign language courses.

A district may elect to support a student's enrollment in a subject area in which the student has not yet achieved a qualifying score if it has been determined to be in the best educational interest of the student.

## Course Limits:

Up to 10 courses overall can be covered under the Postsecondary Enrollment Options Act. The following list describes how many courses may be covered each year depending on the grade in which a student first dual enrolls.

- $9^{\text {th }}$ Grade: Not more than two courses per year in $9^{\text {th }}, 10^{\text {th }}$, and $11^{\text {th }}$ grade, and not more than four courses in grade 12
- $10^{\text {th }}$ Grade: Not more than two courses in $10^{\text {th }}$ grade, and not more than four courses in $11^{\text {th }}$ and $12^{\text {th }}$ grade
- $11^{\text {th }}$ or $12^{\text {th }}$ grade: Not more than six courses per year

These limits may be waived when a written agreement exists between a school district and a postsecondary institution as discussed in MCL 388.513.

## Self-Funded

Students acting independently of the school district's policies may elect to take college courses as well; however, they must meet all course prerequisites required by the college. A dual enrollment approval form signed by a SMC official must be submitted at the time of registration.

## Academies

Academies are occupation-based curricula offered via the Intermediate School District (ISD). Policies and procedures are available through the ISD. The following college courses are not open to students enrolled in academies: BIOL 098, ENGL 115, MATH 098, and MATH 101/102.

## Homeschooled Students

Students who are not participating in the school district curriculum but are completing their high school credential under the guidance of a parent or guardian may also participate in dual enrollment. The students must be currently enrolled in a curriculum in which the outcome of completing that curriculum is a high school credential. Generally, homeschooled students who are part of a partnership wishing to dual enroll at SMC must successfully place out of developmental reading and English (ENGL 115) before taking any courses at SMC. Moreover, prospective students must successfully place out of developmental math (MATH 098 and all course prerequisites) before taking any math or science course. For students ages 14-17, a dual enrollment approval form must be submitted at the time of registration. Adult students (ages 18 and above) are exempt from this policy. Students under the age of 13 are prohibited from taking college courses at SMC. Enrichment courses which are not part of organized academic curricula are not held to the structure of this policy.

## Under-age Students

Students ages 14 to 15 may be admitted to SMC for a specific class or classes only if they have written permission of a responsible school official and their parent or guardian. Students must meet any prerequisites for any course in which they choose to enroll. Parents of students ages 14 to 15 will also sign a permission statement acknowledging the nature of an adult educational environment. Students approved by a school official to participate in a class offered on-site at a middle school or high school are exempt from this policy. Students under the age of 14 will not be permitted to take academic classes at SMC. Students between the ages of 14 and 15 who are homeschooled must also abide by the Homeschooled policy above. Enrichment courses which are not part of organized academic curricula may be enrolled in without restriction.

## High School Expulsion

Students who have been expelled from high school will not be eligible to take college classes at SMC.

## Registration Information

After the first semester (in which students will be registered for courses by a First Year Advisor), students are responsible to register themselves during the appropriate timelines published by the school. Below is information to help students better understand the registration process at SMC. Students who have questions concerning registration should contact the Academic Advising and Resource Center at 269-782-1303 or askanadvisor@swmich.edu.

## Structure of Semesters

The beginning of the new academic year starts with the Fall Semester in September. Each Fall and Spring Semester consists of 15 weeks and the Summer Semester consists of nine weeks. The Fall and Spring Semesters have two sessions embedded within them called Early End and Late Start. An Early End course starts at the beginning of the semester and lasts approximately seven to eight weeks, concluding at the mid-point of the semester. A Late Start course begins near the middle of the semester, runs for approximately seven to eight weeks, and concludes at the end of the semester. Full-length Fall and Spring Semester courses that meet during the day have published final exams. Full-length Fall and Spring Semester courses that meet at night, may have final exams during regular meeting times. Late Start courses will also have published final exam times. Final exams for Early End courses will be scheduled during the normal operating time of the class.

## Schedule of Classes

Students will typically find the schedule of classes available within three weeks of registration opening for the upcoming semester The schedule of classes can be found on SMC Wired. This allows students time to review the classes, meet with their advisor, and prepare for the opening of registration. Students can begin to register for summer and fall semester classes in late March/early April. Students can begin to register for spring semester classes in late October/early November. Registration remains open for students to adjust their schedule until the add/drop period ends in the new semester. Students who have an outstanding balance with the Business Office are not permitted to register for courses until their balance has been paid.

## Full-time Student Definition

The minimum course load required to be considered a full-time student is 12 credits for all semesters. Audited courses do not count toward determining course load. Students who carry 6-11 credits for the fall and spring semester are considered at least half-time status and remain eligible for financial aid. Students who carry a load below half-time status ( 5 credits or less during the fall and spring semester) may not be eligible for financial aid.

## Adding and Dropping Courses

There is a firmly-established deadline each semester for students to add a course or drop a course. SMC's Records Office, Financial Aid Office, and Business Office hold to these deadlines in the processing of grades, financial aid, and tuition charges. Students typically can add and drop courses themselves through SMC Wired through the first week of the semester. After this point with most semester-length courses, students will assume full academic and financial responsibility for their participation in the course. With Late Start courses, students may only have one or two days from the start of the course to add and drop. Students are asked to pay very close attention to these deadlines to ensure that their registration schedule is accurate.

## Lack of Participation Drops

Every faculty member will confirm that students are participating in their registered classes. Students who are not participating by the end of the third week of classes may be administratively removed from the course. Students will have an opportunity to appeal this decision, but every effort should be made by students to actively engage in each course for which they are registered.

## Withdrawing from Courses

Students who do not drop a course by the drop deadline and who want to officially withdraw from a class will be assigned a final grade of "W" for their participation in the course. The window for withdrawing from a course remains until the published last day to withdraw is announced (typically $90 \%$ of the course duration). The last day to withdraw from a course is also published to the student at the time of registration and is listed on the student's schedule on Dashboard. Students should be alert to the different dates for different class formats. Students must see an advisor to start the withdrawal process.

## Grading and GPA Calculations

SMC operates on a traditional 4-point grading scale with the following typical letter grades ( $\mathrm{A}, \mathrm{A}-\mathrm{B}+, \mathrm{B}, \mathrm{B}-, \mathrm{C}+, \mathrm{C}$, etc.). GPA is calculated by taking the total quality points earned and dividing by the SMC GPA hours. Letter grades from previous transfer credit, excluded courses through the course repeat process, incompletes, and withdrawal are not factored into a student's GPA calculation.

To calculate total quality points, you must multiply the point value for the letter grade earned by the number of credits earned. An " A " has a point value of 4 . A student who takes a four-credit-hour course and earns a final grade of " A " has earned 16 quality points,
while a student who earns an " $A$ " in a three-credit-hour course has earned 12 quality points. Divide the quality points by the credits earned and both students have a 4.0 GPA. See the example below for GPA calculation:

SAMPLE GPA CALCULATION TABLE

| Course | Grade | Credit |  | Quality Points |
| :---: | :---: | :---: | :---: | :---: |
| Course 1 | $\mathrm{A}(4)$ | 3 | 12 |  |
| Course 2 | B- $(2.67)$ | 4 | 10.68 |  |
| Course 3 | $\mathrm{D}+(1.33)$ | 2 | 2.66 |  |
| Course 4 | $\mathrm{C}(2)$ | 5 | 10 |  |
| Course 5 | $\mathrm{B}+(3.33)$ | 1 | 3.33 |  |
| TOTALS |  | 15 | 38.67 | 2.578 |

Students in the Honors Program at SMC may earn a letter grade followed by a "H" (e.g., AH, A-H, B+H, etc.). The letter "H" will not change the GPA quality points earned for a particular course, but will display on the student's transcript to indicate that the course taken was administered to the student at an honors level.

Students who earn a GPA of 2.0 or above are considered in Good Academic Standing.

## Understand Financial Aid

Attending college is an investment worth making for students who are ready to meet the challenge. The initial appearance of a lack of funds should not stop anyone from exploring the possibility of making such an investment. Tuition at SMC is half the cost of most four-year schools, and we offer students the financial assistance to help make their dreams come true.

All full- and part-time students should apply for financial aid. Although many awards are based on financial need or on academic achievement, there are numerous scholarships available that are awarded based on a wide range of criteria.

The first step in applying for financial aid is completing the Free Application for Federal Student Aid (FAFSA). The FAFSA is processed through the U.S. Department of Education using eligibility criteria established by the federal government. You can access the FAFSA at fafsa.ed.gov or through the myStudentAid mobile app.

Federal financial aid is primarily need-based and designed to eliminate economic barriers to education. Those students not expecting to meet the need-based criteria should still complete the FAFSA since it is required for loan applications and most scholarships.

Most SMC students receive some type of financial aid. Financial aid at SMC falls into four main categories:

- Grants: Need-based awards that, in most cases, do not have to be repaid.
- Scholarships: Money that is awarded based on grades, talent or donor criteria that does not have to be repaid.
- Federal Work Study: Wages earned for on-campus and limited off-campus student employment.
- Loans: Money borrowed for college that must be repaid.

In addition to financial aid, SMC has several payment options. For more information, contact the Student Account Specialist at 269-782-1298 or email ecashier@swmich.edu.

## Financial Aid Eligibility and Eligibility Requirements

The requirements listed below apply to federal, state, and some institutional and private financial aid programs. Some programs may have additional requirements. In order to be eligible for financial aid, an applicant must have a complete financial aid file and:

- Complete the Free Application for Federal Student Aid (FAFSA);
- Submit proof of high school completion;
- Submit official transcripts from other college(s) attended;
- Be enrolled as a student working toward an eligible degree or certificate program at SMC;
- Be a U.S. citizen or eligible non-U.S. citizen;
- Be registered with Selective Service, if male (males are required to register upon turning 18);
- Not currently be in a federal loan default or owe an overpayment on a federal grant;
- Not be receiving financial aid from another institution; and,
- Be making Satisfactory Academic Progress.


## Types of Financial Aid

## Pell Grants

A Federal Pell Grant, unlike a loan, does not have to be repaid in most cases. Pell Grants are awarded to undergraduate students who have not earned a bachelor's or professional degree. Pell Grants are considered a foundation of federal financial aid, to which aid from other federal and nonfederal sources might be added.

There are limits on the maximum amount a student is eligible to receive each academic year and in total (aggregate Pell Grant limit) The maximum Pell Grant award amount for the 2020-2021 award year (July 1, 2020 to June 30, 2021) is $\$ 6345$. A student may receive less than the maximum award depending, not only on financial need, but also on status as a full-time or part-time student and plans to attend school for a full academic year or less.

Any Pell Grant-eligible student whose parent or guardian died as a result of military service in Iraq or Afghanistan after September 11, 2001, will receive the maximum annual award. The student must be under 24 years old or enrolled at least part-time in college at the time of the parent or guardian's death.

IMPORTANT: A student may only receive a Pell Grant for up to a maximum of 12 full-time semesters or the equivalent. For more information go to http://studentaid.gov/understand-aid/types/grants/pell/calculate-eligibility.

## Federal Supplemental Educational Opportunity Grants (FSEOG)

The Federal Supplemental Educational Opportunity Grant (FSEOG) provides grant funds to qualified students who demonstrate exceptional financial need. The FSEOG is considered gift aid and does not need to be repaid.

To receive an FSEOG, the student must fill out the Free Application for Federal Student Aid (FAFSA) so the college can determine financial need. Students who will receive the Federal Pell Grant and have the most financial need will receive FSEOG first. For more information, go to https://studentaid.ed.gov/sa/types/grants-scholarships/fseog.

## FSEOG Facts:

- Students must meet the general federal aid eligibility requirements.
- Students must maintain Satisfactory Academic Progress.
- Both part-time and full-time students can receive the FSEOG.
- SMC award amounts are generally $\$ 150$ per semester.

First priority is given to Federal Pell Grant recipients whose Expected Family Contribution (EFC) is zero. Remaining funds, if any, are awarded to students with ascending EFC's until funds are exhausted. Students should submit their FAFSA and other required documents (if any) as early as possible since SMC only receives a certain amount of FSEOG funds each year from the U.S. Department of Education Office of Federal Student Aid. Once the full amount of the school's FSEOG funds have been awarded to students, no more FSEOG awards can be made for that year. Awards are generally $\$ 300$ per academic year and are not automatically renewed. Students must complete the FAFSA and meet all eligibility requirements each year.

## Tuition Incentive Program (TIP)

The Michigan Department of Human Services will pay in-district tuition (up to 24 credits per year) and mandatory fees (up to $\$ 250$ per semester) for qualified students who complete a high school diploma or GED by age 20. Proof of high school graduation/GED will be required. Students eligible for TIP receive a letter from the State of Michigan prior to high school graduation. Eligibility for TIP is also determined by the student's financial aid.

## Michigan Indian Tuition Waiver

This program provides tuition waivers to North American Indians who have proper documentation of heritage and who have been Michigan residents for at least 12 months. Certification is received through the appropriate tribe and the Michigan Department of Civil Rights.

## Federal Work Study

The Federal Work Study award is a maximum eligibility amount that the student may earn if a qualified student employment position is secured. The college cannot guarantee employment or that the student will receive the amount initially awarded. The student receives this award in the form of wages which may be used to assist with education-related expenses. Once the student earns their maximum eligibility amount, the hiring department will determine if employment can continue since these funds are limited. Students interested in working on campus must be enrolled, have a completed financial aid file, and complete an online Student Employment Application.

## Financial Aid Loan Programs

If grants, scholarships, and student employment are not sufficient to cover the student's necessary education-related expenses, loan options are available. Because loans are financial aid that must be repaid, a student should think carefully about how much to borrow for educational expenses.

## Federal Direct Loan

The Direct Loan program provides low-interest loans that are funded by the federal government. There are two different types of Federal Direct Loans, subsidized and unsubsidized. It is very important to understand the differences between these two. The Subsidized Federal Direct Loan is considered a need-based loan. Need is defined as the difference between the institution's Cost of Attendance (COA) and the Expected Family Contribution (EFC) that was determined from the Free Application for Federal Student Aid (FAFSA).

Funding from the Subsidized Federal Direct Loan programs can never exceed the student's need. Because the Subsidized Federal Direct Loan is considered a need-based loan, the federal government pays the interest on the loan while the student is in school (a minimum of half-time enrollment is required as defined by the federal regulations and institutional policies).

The Unsubsidized Federal Direct Loan is considered a non-need-based-loan. The Unsubsidized Federal Direct Loan is awarded to students who do not have a demonstrated need or whose need portion of their budget has been met but still have room in their overall Cost of Attendance for more funding and have remaining Federal Direct Loan eligibility.

Because the Unsubsidized Federal Direct Loan is considered a non-need based loan, the federal government DOES NOT pay the interest while the student is in school. It is the student's responsibility to pay accrued interest while in school or choose the option to capitalize the interest.

Capitalization of interest means the accrued interest on the Unsubsidized Federal Direct Loan will be added to the principal balance of the loan. The loan will not go into default to non-payment of interest while the student is in school or in the grace period, but the interest will build, and the student will pay interest on interest during repayment. It is suggested that, if at all possible, the student pay the interest while in school.

As of $7 / 1 / 2019$, interest rates for both Subsidized and Unsubsidized Direct Loans for undergraduate students is $4.53 \%$. The interest rates are based on the 91-day U.S. Treasury Bill index (subject to change). The interest rates are variable and change annually on July 1. The interest rate is capped at $8.25 \%$.

## Federal Direct PLUS Loan

This is a non-need-based source of loan funds available to parents of dependent students who are enrolled for six or more credits per semester. In this program, the parent is the borrower, a credit check is performed on the applicant, and repayment of interest and principal begins within 60 days of disbursement of the loan unless the parent requests a deferment of payments while the student is enrolled at least half-time in school. The Parent PLUS loan application and promissory note can be completed by going to studentaid.gov.

## Private Alternative Education Loan

Private Alternative Educational Loans are student loans offered through agencies other than the federal government. These loans are based on the creditworthiness of the borrower and/or co-signer, if applicable.

## Verification

Some students are selected for review in a process called "verification." In this process, the Office of Financial Aid compares information from the FAFSA with copies of the student and/or parent(s) federal tax transcripts, W-2 forms (if applicable), Dependent or Independent Verification Worksheets, and other financial aid documents. The Office of Financial Aid is mandated by the federal government to ask for this information before awarding federal aid. If there are differences between the FAFSA and the financial documents, the student or the Office of Financial Aid may need to make corrections electronically. Once the FAFSA has been electronically downloaded, the student will be sent a letter listing the required verification documentation. The required documentation will also be posted on SMC Wired/Student Dashboard. Students should complete and return the required documents as soon as possible; financial aid awards cannot be determined until the verification documents are received and processed by the Office of Financial Aid. If verification documents are submitted and there are found to be incomplete/missing items, the student will be notified by email, and documents will be filed as incomplete.

Once the complete documents are received, financial aid staff will review the information. If a correction does not need to be submitted and the file is complete, the student will receive an award letter and email notification. If the documents are received and a correction needs to be made to the FAFSA, the Office of Financial Aid will submit the change electronically. Once the correction is electronically downloaded and the information is correct, the student will receive an award letter and email notification. Sometimes
students need to make corrections to the FAFSA before the financial aid office can review the information. In this situation, the student will be notified that he/she must make corrections to their FAFSA.

## Conflicting Information

If at any time SMC financial aid staff discovers conflicting information, they are required by federal law to obtain whatever documentation is necessary to resolve the conflict. The following are examples (not all-inclusive) of common areas reviewed for conflicting information: number of people in household, number of people in college, tax filing status, child support paid, and marital status.

## Satisfactory Academic Progress

Federal regulations require that students receiving financial aid maintain progress toward the completion of a certificate or associate degree. The student must complete, with a passing grade, a minimum of $67 \%$ cumulative attempted credit hours and maintain a minimum cumulative 2.0 GPA . The student must also complete the program of study within $150 \%$ of its published length. Additional information can be found at swmich.edu/financialaid.

## Return of Title IV Policy

This policy is for students who completely withdraw from classes. In accordance with the federal code of regulations 34 CFR 668.22 , the Office of Financial Aid is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, cease attendance, or take a leave of absence prior to completing 60 percent of a payment period or term. The federal Title IV financial aid programs must be recalculated in these situations. Title IV aid includes the Pell Grant, Subsidized and Unsubsidized Direct Loans, Perkins Loans, FSEOG, Federal Work-Study, and Parent PLUS Loans.

The calculation is made for all federal financial aid recipients to determine whether a student who completely withdraws during a term has "earned" the monies disbursed. A student "earns" his/her aid based on the period of time they remain enrolled. During the first $60 \%$ of the term, a student earns student aid funds in direct proportion to the length of time he/she remains enrolled. After the $60 \%$ point in the payment period or period of enrollment, a student has earned $100 \%$ of the Title IV funds he or she was scheduled to receive during the period. Any aid received in excess of the earned amount is considered unearned. If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds, and the student may be required to return a portion of the funds. For more information regarding SMC's withdrawal process, please refer to the Academic Policies section of the catalog or contact the Records Office at 269-782-1351 or records@swmich.edu. For more information regarding SMC's Return of Title IV policy, please refer to SMC's Consumer Information (https://www.swmich.edu/about-smc/consumer-info) or contact the Office of Financial Aid at 269-783-2143 or finaid@swmich.edu.

## Repeated Coursework

Federal regulations limit the number of times a student may repeat a course and receive aid for that course. A student may receive financial aid for only one repetition of a previously passed course, even if a higher grade is needed as a prerequisite for the nextlevel course. If a student enrolls for a third time in a course for which he/she previously received a passing grade, there will be a recalculation of aid to exclude the credits for the repeated course.

## Overaward Policy

An "overaward" is when your need-based awards exceed your financial need, or the total of your awards exceed your Cost of Attendance. If you have been overawarded, federal regulations require SMC to adjust your awards accordingly. If your unrevised awards have already been disbursed, the revision may result in a bill to recover the overaward. Need-based aid includes federal grants, Federal Work-Study, Subsidized Loans, and some outside resources. Non-need based aid includes Unsubsidized Loans, Federal Parent Plus Loans, and private education loans.

There are several possible reasons that an overaward can occur:

- You receive additional awards;
- Your residency status changes;
- Your enrollment status changes;
- Your Cost of Attendance changes;
- You report changes to your financial circumstances, and/or;
- The verification process results in changes made to your FAFSA data.

The federal overaward regulations require colleges to take into account any resources they know about or can anticipate when awarding or disbursing aid. In addition, colleges are required to reduce the size of the need-based aid package whenever the student receives need-based resources that exceed financial need. Additionally, your total resources generally cannot exceed your Cost of Attendance.

To avoid an overaward, first, notify financial aid of any money you are receiving from outside sources, such as scholarships, alternative loans, etc. Second, check with financial aid before applying for additional aid to see if the maximum financial aid has already been awarded. If an overaward occurs, aid will generally be reduced in the following order:

- Federal Work Study
- Direct Unsubsidized Loan
- Direct Subsidized Loan
- State Funds
- Institutional Scholarships
- FSEOG
- Foundation Scholarship


## Tuition and Fees

## Tuition Per Contact Hour

- Dual-Enrollment: $\$ 121.50$
- In-district Resident: $\$ 125.50$
- In-state Resident: $\$ 164.75$
- Out-of-state Resident: $\$ 179.50$
- International: $\$ 208.00$


## Contact Hour Fees

A total of $\$ 53.75$ in fees will be charged per contact hour to all students. The fees help support services provided by the college that are necessary to enhance the registration process and learning environment. Of the $\$ 53.75, \$ 22.75$ is assessed as a registration fee and $\$ 31.00$ as a technology fee to fund campus and classroom computer technology equipment and support upgrades. Other fees may be assessed based on the course structure or payment plan option.

## Residency Policy

Information provided on the Application for Admission determines residency for tuition purposes. The college will require verification of place of residency. Residency status, as defined below, may be reconsidered upon presentation of written proof that the student's bona fide place of residence has changed. Students living in SMC housing will not constitute an in-district resident unless their permanent home address qualifies them for such a designation.

## In-district Resident

- A student who holds or in the case of a dependent student, whose parents or legal guardians hold, real taxable property in the Southwestern Michigan College district (all of Cass County plus Keeler and Hamilton Townships in Van Buren County)
- A student who has resided in the aforementioned governmental unit before the first day of the semester in which he/she initially registers for class.
- A student who receives Veterans Education Benefits.
- A student who enrolls in a program in which the college is member of a consortium or for which the college serves as a fiscal agent.


## In-state Resident

- A student holding or a dependent student whose parents or legal guardians hold real taxable property within the state of Michigan but outside the in-district areas defined as in-district.
- Active duty military personnel and dependents, if Michigan is the active duty member's legal state of residence or if the active duty member is stationed in Michigan.


## Out-of-State Resident

- Students who are permanent U.S. residents and do not qualify as in-district or as in-state students.


## International

- A foreign national in non-immigrant alien status.


## Students Granted Asylum

Students who can provide documentary evidence that they have been granted asylum by the United States government or who are seeking legal citizenship will be charged out-of-state tuition.

## Choice Act Covered Individuals

The following individuals shall be charged the in-district tuition rate.

- Any individual using educational assistance under either Chapter 30 (Montgomery GI Bill® - Active Duty Program), Chapter 31 (Vocational Rehabilitation), or Chapter 33 (Post $9 / 11$ GI Bill®), of Title 38, United States Codes, and/or Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311 (b)(9)) who lives in the State of Michigan while attending Southwestern Michigan College (regardless of his/her formal state of residence).


## Changing Residency Status

The college reserves the right to require documentation acceptable to the college in all cases of residency determination and verification. Documentation is required of any student changing to a reduced tuition status but may be asked of others as well. All accepted proof of residency documents must clearly indicate name and permanent address and must be verified by the Records Office prior to the first day of the new term to take effect for that term. All documents must be originals or copies certified with a raised seal or stamp. If requested, the following forms of proof are acceptable:

- Valid current driver's license or state-issued ID card, AND one of the following pieces of documentation:

Most recent property tax receipt;
Utility bill or credit card bill;
Account statement from a bank or other financial institution;
Life, health, auto, or home insurance policy that clearly identifies the permanent address;
Federal, state, or local government documents, such as receipts, licenses, or assessments;
Vehicle title and registration;
Mortgage, lease, or rental agreement including landlord's telephone number.

## Tuition-allowable Refunds

Tuition is charged to provide instructional services, and, as such, refunds must be limited once those services have begun. Registration fees are used to establish the initial schedule, process student registration papers and complete the withdrawal process. Technology fees are used partially to defray the costs of providing academic and administrative computing services and resources. Both are refundable following the tuition refund policy. Special fees are listed each semester in the college schedule where they are explained, and notations indicate under what circumstances they are or not refundable. A complete listing of required supplies and equipment with costs by course is available in the college bookstore and on the bookstore's website.

Tuition/fees are refunded during the drop period as indicated on the Important Dates page listed in the Program Guides booklet. Refunds are based upon a calendar day calculation with calendar day defined as the days of the week including Saturday, Sunday, and holidays. For refund purposes, the start date of an individual course is the first scheduled class meeting.

It is vital to understand that a student is considered enrolled in a class UNTIL they have dropped their class. Consequently, a student is financially liable for the tuition/fees associated with a registered class until it is officially dropped. Non-attendance is NOT considered as official notice of dropping a class and does not constitute a basis for a refund.

## General Refund Policies

The following general refund policies are effective as of July 1, 2006 and remain for the 2020-21 academic year:

- If the college cancels a class, $100 \%$ of the tuition and fees will be refunded for that class.
- If the student officially drops a class within the drop period, $100 \%$ of the tuition and fees will be refunded for that class.
- If the refund period falls on a weekend or holiday, the refund period will be extended to the end of the following business day.
- If the student officially withdraws after the drop period ends, no tuition and fees will be refunded.
- Refunds assessed during the drop period will be issued by check or by electronic refund if elected. Applicants should allow four to six weeks for refund processing and/or mailing.
- The college recognizes that on occasion, students may need to request an exception to the published drop/withdrawal deadlines. Written requests can be made if the student meets the criteria of extenuating circumstances outlined below. In all cases, the circumstance must have interrupted the student's ability to: a) attend class for a substantial length of time, b) complete the semester, and/or c) adhere to the usual withdrawal or refund procedures. Examples of extenuating circumstances may include severe illness or medical emergency, death of immediate family member, or U.S. military active duty or induction. The request for exception must be made during the same semester in which the interruption occurred. For access to the complete policy and the Request for Exception for a Late Refund or a Late Withdrawal form, visit the Records section of the Student Quick Links channel on the My Resources tab in SMC Wired.


## Indebtedness Policy

Students are expected to honor any debt to the college. Failure to pay will bar a student from use of college services, the library, and issuance of transcripts. Students who owe tuition/fees or have other debts due the college will not be allowed to register until the debts have been paid. The college reserves the right to withhold transcripts until debts are paid in full. Collection processes will be initiated for failure to pay.

## Veterans Benefits and Transition Act of 2018

No penalty will be imposed, including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement that a Chapter 31 or Chapter 33 beneficiary borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the VA.

## Academic Policies

The following academic policies serve to help students understand the "do's and don'ts" of their educational experience. SMC's faculty, staff, administrators, and board of trustees take careful aim at structuring academic policies in a way that benefits the growth and development of all students and supports the quality mission of the school.

## Academic Appeals Process Policy

Policy: Students are afforded an appeal process when decisions are made by staff, faculty, or administrators related to academic procedures, situations, or performance (such as course grades).

SMC values students, listens to them, and welcomes healthy discussions and resolutions. Students should always try to resolve issues or differences in a professional manner by going straight to the source (i.e., instructor, department official). Students are expected to initiate the appeal process within 10 business days from grade being posted. If the student is unsatisfied with the outcome of this initial discussion, then the student should address the issue with the appropriate supervisor (i.e. Department Chair, Dean, Vice President). If the outcome of this conversation remains unsatisfactory, the student may submit an appeal form available on SMC Wired. For matters that occurred beyond 30 days, a grievance process is available.

## Academic Credit Limit Policy

Policy: Students should not register for more than 20 credits in a given semester without approval.

SMC values quality academic learning. While some students may be able to manage more credits per semester, SMC believes that attempting too many credits at one time leads to a student giving less than their best effort in each course. The typical course load for most SMC students is 12-15 credits per semester. Students who take fewer than 15 credits each semester may cause their program to extend beyond two years. Some semesters within certain academic programs may require more credits than the policy permits. If specified by the program, this is acceptable. Otherwise, students who wish to appeal this policy may complete a Credit Limit Appeal Form in the Records Office.

## Academic Forgiveness Policy

Policy: Under certain circumstances, students with a prior record of poor academic performance can have previous grades forgiven from their academic record, thus making it more manageable to obtain a degree or certificate from SMC.

Students who previously had a GPA below a 2.0 and who, upon re-entering SMC after a minimum five-year absence, completed 12 credit hours at SMC with a GPA of 2.0 or better (not including performance or developmental courses) may apply to have certain courses forgiven from their academic record. Such forgiven courses must have final grades of C- or below and must have been taken at least five years ago ( 60 months as measured from the ending date of the most recent term to be dropped). Forgiven courses will be deleted from GPA calculations. The original transcript of grades, however, will remain intact, but will include the forgiven coursework, clearly identified with an asterisk. An academically forgiven course cannot count toward degree completion. Students may not invoke academic forgiveness after they have graduated. Academic forgiveness cannot be applied to pass-fail type courses or in courses in which a student was found previously to be in violation of academic integrity. Academic forgiveness can only be invoked once and cannot be reversed once invoked. Students should be aware that the re-calculation of the GPA, earned hours, attempted hours, and quality points from the Academic Forgiveness process does not apply to the student's financial aid record, only to the academic record. All course attempts, whether forgiven or not, must be used in all financial aid calculations and determination for future financial aid.

## Academic Honors Policy

Policy: Students are awarded academic honors after completing a degree program in which they earned a cumulative GPA of 3.5 or greater.

Academic honors are noted on the official transcript of each student who has earned such honors following completion of their degree. Academic honors are not associated with certificate programs. For commencement purposes, honors are determined following the Fall Semester prior to the May commencement ceremony. It is possible for students to be recognized with honors at the spring commencement ceremony and not officially have honors on their transcript if their final semester grades drop them below the 3.5 cumulative GPA threshold. Students in the Honors Program at SMC are recognized as Honors Program graduates on their transcript by successfully completing a minimum of 12 honors-course credits.

## Academic Statuses Policy

Policy: Students who have a cumulative GPA below 2.0 will be placed on academic probation and can be suspended or dismissed from SMC.

SMC knows that education is an investment of time, energy, and resources for every student. Students must have a minimum GPA of 2.0 in order to complete a degree or certificate program. Therefore, students who are failing to meet this minimum standard must seriously consider re-evaluating their priorities to earn a degree or certificate from SMC. Students who do not meet the 2.0 GPA requirement will be notified of their academic status by SMC officials.

Determination of academic statuses is performed by the Academic Status Committee which includes representatives of SMC's faculty and staff. Communication to students who are failing to meet the GPA requirement will occur at the conclusion of each academic semester in time for the next semester and will include one of the following academic statuses:

## Academic Probation (PR)

This academic status will be communicated to each student who falls below a 2.0 cumulative GPA for the first time. This academic status will also be communicated to each student who remains below a 2.0 cumulative GPA, yet their GPA is improving (e.g., improvement from 1.47 to 1.78).

## Academic Probation Continued (PC)

This academic status will be communicated to each student who was on Academic Probation and did not improve their cumulative GPA during the next semester of enrollment (e.g., GPA decreased from 1.85 to 1.68). Probation Continued students may be limited in the number of credit hours that they are permitted to register for during the next academic semester.

## Academic Dismissal (DS)

This academic status will be communicated to each student who was on Probation Continued and did not improve their cumulative GPA during the next semester of enrollment (e.g., GPA decreased from 1.68 to 1.42 ). Dismissed students are not permitted to register for classes at SMC for one calendar year and must re-apply to SMC for admission.

Students who are placed on any academic status and who are registered for courses should seriously consider their course load, setting up a schedule that is conducive to their success with the help of an advisor. Any student who wishes to appeal their academic status has the opportunity to do so. Students should write a letter to the Records Office within two weeks of receiving their status. The Academic Status Committee will review the appeal and respond back to the student within a few weeks, but typically not before the start of the new academic semester.

## Auditing a Course Policy

Policy: Students who audit a course must declare the audit to the Records Office by the established date in the Action Calendar, usually within the first few weeks of the course, and must realize that auditing a course does not fulfill graduation requirements.

SMC values students who desire to learn. Auditing a course typically means that the student wants to learn a particular subject without earning credit, satisfying graduation requirements, or receiving a typical letter grade. Students may complete the audit form found in the Records Office and return the form to the Records Office once proper signatures are obtained. On the form, the student is asked to secure the written permission of the instructor. The instructor can determine the level of involvement expected from an auditing student. Some instructors may choose not to have their course audited. Once a student chooses to audit the course and secures the instructor's permission, the student may not later switch the course back to a for-credit course. A final grade of " $X$ " will be used on the grade sheets and permanent record.

## College Catalog Advising Year Policy

Policy: Students are assigned a college catalog year that represents the curriculum that they are to follow in order to satisfy degree requirements.

Initially, the college catalog advising year of the student is the year in which the student started at SMC (e.g., if a student first enrolled in Fall 2020, the student is to follow the program outlined in the 2020-21 College Catalog). This is true as well for early middle college students. This college catalog advising year may be modified only at the request of the student and the approval of the advisor. It is not to be adjusted to a year prior to the entry year of the student. Advisors and department faculty should not
assume that every student is following the most current catalog advising year for their program. Final communication of the correct advising year of a student must be sent to the Records Office for processing. Students who change majors or degree programs should assume the catalog advising year that corresponds to the year in which the decision occurred. Students who return to SMC following a one year or more absence [defined as at least two major semesters (Fall and Spring)] from the college will be assigned the advising year that corresponds with the year of their return.

## College Transcript Prerequisite Course Policy

Policy: Students must provide an official transcript prior to enrolling in courses which require the prerequisite class they earned at another institution.

There is no grace period for providing an official transcript for prerequisite purposes. The prerequisite course must have a final grade. In-progress courses are not sufficient for prerequisite purposes. Official transcripts are required if students wish to receive SMC credit for their transfer classes. If the official transcript supporting the prerequisite course is not received by SMC in a timely manner, the student will need to take the prerequisite course through SMC. If flagged for financial aid unusual enrollment, students will be required to submit all college transcripts. Students wishing to pursue a degree in nursing are required to submit all college transcripts.

## Course Placement Policy

Policy: Placement tests are for the purpose of putting the student in the best learning level for his/her current knowledge base, and are not credit-bearing exams.

SMC wants every student to have a great learning experience and to take courses that they need based on their knowledge and skill level. Some students show the ability to "test out" of certain courses (e.g., math and English courses). A student who takes a placement test like Accuplacer Next Gen is not earning academic credit but is demonstrating their ability in a subject area at a certain level in order to clearly show the correct course to be placed into. Students who, through this process, test out of a course that is required for their declared academic program still need to satisfy the requirements of the academic program. In some cases, this may require students to need a curriculum variance (See Credit by Variance, Exam, or Experience policy). After testing out of a course in your academic program, talk to your advisor for details to ensure that you are taking the right courses to finish your certificate or degree program.

## Course Repeat Policy

Policy: Current and former students may repeat courses once to improve their grade only if such courses are offered in the current curriculum.

When a student repeats a course, the best grade earned between the two attempts will be factored into the student's cumulative GPA. Both attempts of a course will be present on the academic transcript. Students are strongly encouraged to investigate any financial ramifications for repeating a course with the Office of Financial Aid prior to enrolling in a course again. Students may repeat courses that they have previously passed, failed, or withdrawn from. A student cannot use a different course to repeat the former course (e.g., cannot use MATH 150 as a repeat for MATH 128). If a student needs to repeat a course two or more times (i.e., three or more overall attempts), the student must submit a Repeat Course Appeal Form. Students enrolled in the nursing program are subject to the repeat course policy as outlined in the Nursing Student Handbook.

## Credit by Variance, Exam, or Experience Policy

Policy: Students may satisfy program requirements by 1) securing proper approval for a course variance (e.g., take EDUC 230 instead of EDUC 217); 2) taking an appropriate, qualifying exam (e.g., CLEP, AP, ACE, or other through Testing Services); 3) or in some cases through experience (e.g., military training, adult education programs, proper certifications/licensures).

SMC will work with you to ensure that proper steps are taken to earn a degree that you will be proud of. Please work closely with your advisor, dean, the Testing Center, and Records Office to ensure that all approved variances, exams, and experiences are recorded on your academic record. Please know that your advisor or dean may not approve your variance, exam, or experience. If that happens, please know that they are striving to act in your overall best interest. Please also know that some forms of curriculum variances may not satisfy MTA requirements. For instance, taking and passing a CLEP exam may satisfy a requirement for your degree, but will not satisfy MTA.

## Credit Hour Definition Policy

Policy: SMC uses multiple modalities of instruction to teach its courses (e.g., hybrid, variable, independent study, practicum, virtual), but ensures that all courses satisfy the definition of a credit hour therefore ensuring that a student's education meets or exceeds accreditation standards.

SMC values quality education. SMC defines a credit hour as 800 minutes of instruction per semester. One credit hour must involve no less than the equivalent of one hour of direct faculty instruction (defined as 50 minutes for 16 weeks) and a minimum of two hours of out-of-class student work. Even though SMC courses are of a shorter duration than 16 weeks, faculty still adhere to the rule of 800 minutes equals one credit hour. Virtual, hybrid, individual instruction, and other-formatted courses make adjustments so that the total number of hours and minutes of work required by students is equivalent to that of a traditional face-to-face class.

## Disposition of Academic Records Policy

Policy: Student transcripts are maintained permanently, but other academic records are only maintained for five years by the Records Office.

SMC strives for safe and accurate record keeping of a student's academic records that may include the following: transcripts, transfer credit evaluations, curriculum and name changes, drop/add requests, graduation applications, admission applications, FERPA-related documents, and international student documents. Once a student withdraws or graduates from the school, most academic records are kept for five years. After five years, such documents are likely to be disposed, with the exception of the academic history records (i.e., transcript) of the former student. Faculty only maintain gradebooks from previously taught courses and the work of students in those courses for 30 days following the final grade being posted.

## Dropping, Withdrawing, Adding Credits Policy

Policy: Students may change their schedules after they have registered for the semester, but must do so within the timeline and deadlines provided for each semester.

Students should refer to the Academic Calendar for key dates and deadlines regarding a student's ability to adjust their schedule. Additional key dates for adding, dropping, and withdrawing can be located in the details of registering for classes through SMC Wired and on the Student Dashboard. Students should be aware that there are likely different deadlines for withdrawing from hybrid, early end, and late start courses. Students should be aware that dropping or withdrawing from a course does not necessarily generate a financial return to the student, depending upon the timing of such transactions. Withdrawing from a course or several courses may also have significant financial aid implications. Students should always consult with financial aid prior to withdrawing from a course to better understand the potential impact to their finances.

## EDUC 120 Waiver Policy

Policy: Educational Exploration and Planning is a core requirement of all degrees and most certificate programs at SMC and can only be waived under specific conditions.

Students who have successfully completed a minimum of 15 credit hours of college-level, post-high school credits (performance and developmental courses do not apply) can have EDUC 120 waived as a requirement in their SMC program. These 15 credit hours should be evidenced through attendance as a full-time student at an institution prior to enrollment with SMC. Current dual-enrolled students should not register for EDUC 120. Early middle college students should plan to take EDUC 120 in their $13^{\text {th }}$ year. Waiving the requirement does not provide the student with credit hours. Students may have to earn additional credit hours to compensate for the waiving of EDUC 120.

## ENGL 115 Waiver Policy

Policy: Students must meet certain criteria in order to receive a waiver from ENGL 115, a fundamental prerequisite course for many other courses at SMC.

Students can earn a waiver for ENGL 115 with performance on specific tests like the SAT or ACT or tests offered through the Testing Center. Students who do not meet these testing standards may qualify for an alternative ENGL 115 waiver by submitting an official college transcript to be evaluated by SMC. The official college transcript must reflect 12 or more credits of textbook-dependent courses with a grade of $B$ or better in each course as evaluated by the appropriate academic personnel, and/or the student must have demonstrated a 2.75 or higher cumulative high school GPA. Dual enrolled students must be able to demonstrate a high school GPA of 2.75 or higher to be awarded the ENGL 115 waiver.

## FERPA and Student Education Records Policy

Policy: The institution maintains the privacy of student education records in its possession, with the exception of those situations in which the law or consent of the student permits disclosure according to FERPA legislation.

A complete FERPA policy is available to every student upon request in the Records Office. The policy helps protect the privacy of student education records. FERPA gives students the right to inspect and review education records, the right to seek to amend those records, and to limit disclosure of information from the records in general or to specific individuals. The intent of FERPA is to protect students and to ensure the privacy and accuracy of their education records.

FERPA does allow SMC to disclose directory information about students without written permission upon request from third parties without violating FERPA. SMC has defined directory information as the student's name, SMC email address, curriculum, participation in officially recognized activities, dates of attendance, and degrees and awards received. Students have the option to restrict release of this information by providing written notice to the Records Office.

## Final Examination Policy

Policy: In any particular course, the course instructor or Dean of the school determines whether or not a final examination is appropriate and to be given. Such determination should be announced in class early in the semester.

It is the intent of SMC that all final examinations for full semester-length courses and late-start courses (meeting the last 7-8 weeks of the semester) be given on the day scheduled by the institution and published during the semester. However, on certain and rare occasions, final examinations are not deemed appropriate for certain courses or are scheduled at times other than published. Alternative final exam times should be cleared by the academic department with the Records Office or VP of Instruction prior to announcing to the students enrolled in the course. Students who have more than two final exams on the same day may contact an instructor to make special arrangements to take an exam at a different time.

## Final Grade Change Policy

Policy: A student's final grade can only be changed within 30 days after the posting of the grade and only if an error in calculation or the actual grade posting was found to be incorrect. Otherwise, the final grade stands.

Students are responsible for checking their final grades shortly after grades are to be posted. If a student suspects an error has occurred, they should contact their instructor directly, within 10 days of the date after the grade was posted. If an error was found to have occurred, the instructor will submit a Change of Grade form to the Records Office for proper posting of the new grade. Change of Grade forms must be approved by the dean or VP of Instruction.

## Fulfillment of Michigan Transfer Agreement (MTA) Policy

Policy: Not all courses that satisfy MTA requirements will satisfy SMC degree requirements, and not all courses that satisfy SMC degree requirements will satisfy MTA requirements.

SMC wants to work closely with students to help them achieve both the MTA and their SMC degree, but different standards have been set to govern these two distinct achievements. For instance, students cannot use a successful CLEP Exam result to satisfy MTA (according to MTA policy), but may be able to use that same CLEP score to satisfy a graduation requirement in their degree path at SMC. Additionally, transfer credit from another university may meet MTA requirements but not SMC degree program requirements. SMC wants students to satisfy both and to do so properly so that these credentials are valued by other universities and/or employers. Consult with the Academic Advising and Resource Center for details about your specific situation.

## Graduation Policy

Policy: To graduate from SMC, a student must complete all degree requirements (or have approved curriculum variances noted) on the Curriculum Checksheet for their program of study for the appropriate program year and have at least a 2.0 overall GPA.

The Graduation Policy is different from being eligible to participate in commencement and different from securing one's diploma. The Graduation Policy addresses what is required to earn a degree from SMC. The Curriculum Checksheet lists all of your program requirements including the courses necessary to take, the credits necessary to earn, the grades needed, and prerequisite requirements. It is the student's responsibility to ensure that they have met all graduation requirements. Please work closely with advisors in the Academic Advising and Resource Center as you start your final year of study.

## High School Transcript Proof Policy

Policy: All students are required to provide a final transcript with a graduation date or GED transcript.

Students receive a one semester grace period of not having their final high school transcript to SMC officials, which will be their first semester of enrollment only. After this first semester, a student will not be permitted to register for any classes at SMC without a final, official high school transcript on file that indicates the graduation date (or equivalent GED document). This includes registration for Summer/Fall. A student cannot register for both Summer and Fall semesters simultaneously unless this transcript is received. Students who are attending SMC while in high school should work closely with the SMC Manager of Dual Enrolled Student Success to supply transcripts as needed. Upon completion of the high school curriculum, a final high school transcript will be required to be on file with SMC.

## Incomplete Grades Policy

Policy: Only in highly unusual situations, such as serious illness or other emergencies, will students be assigned an incomplete ("I"), pending a final grade. Students may be issued a maximum of 45 days to complete the remaining coursework.

Students may request an incomplete through direct communication with the instructor. The instructor does not have to grant the additional course time and should only grant such time if highly unusual circumstances outside the control of the student occurred during the course, particularly later in the course. Additionally, the instructor can determine which assignments can be made up during the post-term timeframe, and the instructor can also determine the appropriate length of the incomplete not to exceed 45 days. In rare cases, an extension beyond the 45 days is necessary. The individual faculty member, with the dean's approval, can approve such extensions.

## Legal Name Change Policy

Policy: Students who have had their legal names changed by the appropriate government entities shall inform SMC of this change by completing the Change of Name form in the Records Office.

Official documentation showing the name was changed legally is required. Acceptable documentation includes court order, driver's license, passport, social security card or Tax Identification Number card. Former names and previous identities are maintained in the college student information system database to ensure correct selection when records are searched.

## Military Withdrawals Policy

Policy: Students who are members or are the spouse of a member in the National Guard or reserve forces of the United States and who are ordered to military service, federal service, or duty may complete or withdraw from course work without financial penalty.

SMC is a military-friendly campus that holds to firm academic guidelines. Military students should contact the School Certifying Official at veterans@swmich.edu from their school email account to report their need to return to duty/training. In situations when the duty/training required is of a short duration, it may be determined that the student can work successfully with each instructor to continue making progress in their course(s). In other situations, this may not be possible, and the student must enact the Military Withdrawal. Our School Certifying Official will communicate with the student to let him/her know the exact paperwork that will need to be completed in order to withdraw from classes, as well as any paperwork needed to ensure the student is not responsible financially for the semester.

## Participation Confirmation Policy

Policy: Students are expected to be in attendance and participate outside the classroom for all courses in which they are registered. Failure of a student to participate in their courses may not excuse a student from academic and financial consequences if they are registered for the course.

SMC values student learning and personal responsibility. If a student signs up, then he/she needs to be an active participant. This type of character and consistency is important for achieving life goals. The failure of a student to properly drop or withdraw from courses during the appropriate timeframe outlined by SMC does not necessarily excuse the student from the consequences, both academic and financial. Students should refer closely to the Academic Calendar for key deadlines for adjusting their semester academic schedule. Students who lack any type of participation in a course will receive communication from SMC personnel (typically during week three of the semester) informing them to either participate immediately or risk being administratively dropped. An appeal process is available to these students.

## Preferred Name Policy

Policy: Students may be called by a preferred name that differs from their given name while at SMC. However, the given name must still be tied to the student's official SMC records in certain circumstances for legal reasons.

SMC recognizes that there are members of our community who prefer to use names other than their legal names to identify themselves. SMC is committed to using the preferred names of individuals in our community wherever possible. There are certain legal documents and communications that require use of an individual's legal name.

SMC allows students to use a first name different than their legal name on certain college records. Any student may choose to identify a preferred first name in addition to their legal name (as listed on the driver's license, social security card, Tax Identification Number card, or passport). The college will display the preferred first name where feasible and appropriate and make a good faith effort to update reports, documents, and systems accordingly.

Here is a partial listing of areas in which the preferred and legal names may appear: advisor/advisee lists, class/grade rosters, commencement program, President's and Dean's Lists, diploma, email display and username, ID card, major/minor lists, online student directory, and residence life rosters.

Here is a partial listing of areas in which the legal name may appear: billing statements, enrollment verifications, financial aid documents, immigration documents, medical documents, official correspondence with external entities, official and unofficial transcripts, paychecks, W2s, and 1099-T.

## President's and Dean's List Policy

Policy: Students are recognized on the President's List for GPAs of 4.0 in a given semester with a minimum of 12 credits earned in that semester. Students are recognized on the Dean's List for GPAs of 3.5-3.99 in a given semester with a minimum 12 credits earned in that semester.

SMC believes in celebrating outstanding educational achievements. Students are notified via letter of President's List and Dean's List accomplishments.

## Reverse Transfer Policy

Policy: Students who previously attended SMC and earned a minimum of 30 credits within the previous seven years may earn a SMC associate degree by transferring credits from their new school back to SMC.

The Record's Office at SMC will review the transfer credits and determine if a SMC degree can be awarded. Students who are found to have earned a SMC degree are eligible to participate in the next commencement ceremony by following all graduation procedures.

## Second SMC Degree Policy

Policy: Students may seek a second degree from SMC, but at least 21 credits of the second degree must be comprised of credits that are distinct from the first degree program. Additionally, all requirements of the second degree program must be satisfied.

SMC wants each degree that a student earns to have value to their future. Therefore, students will not be permitted to earn another "credential" from SMC without completing at least 21 credits of the new program through SMC. Students need the approval of a dean before pursuing a second SMC degree and should always consult with financial aid prior to starting a second degree program to understand the financial options available. In many cases, once the first degree is conferred, the student's financial aid options may become quite limited.

## Transfer Credit Policy

Policy: Transfer credits to SMC can be awarded from institutions that are regionally accredited postsecondary educational institutions.

SMC values academic quality and accountability in the standards and processes of other schools in the evaluation of transfer credit. Students must have an application for admission on file with SMC and have an active student record before any credits will be evaluated for transfer. Transcripts must be sent directly to SMC from the transferring institution. Hand-delivered transcripts will only be accepted if the seal on the envelope has not been broken. SMC transfers credits, not grades. Therefore, transfer credits do not impact your SMC GPA positively or negatively. AP and CLEP test scores can be evaluated by SMC, but original scores, not copies or screen shots, should be sent directly to SMC. CLEP test scores do not satisfy MTA requirements. Military transcripts are also evaluated for academic credit by SMC. SMC only accepts grades of C or better for transfer. SMC only accepts courses for transfer that are 100 level or above and that were considered as counting toward credits needed to graduate at the previous institution. Precollege courses do not transfer to SMC. SMC will attempt to award equivalent course credit for 100 and 200 level courses, and when direct equivalencies are not available, elective credit will be awarded in an appropriate academic subject. SMC will not evaluate 300 or higher level courses unless equivalent course credit can be awarded (e.g., PSYC 364 at ABC University $=$ PSYC 260 at SMC). Quarter credits will be converted to semester credits and reflected as semester credits on the SMC student record. A transfer course must be within 1 credit hour of SMC's standard to be considered. Credit is not awarded for seminar, student success courses, or special topics courses, nor is credit awarded for math courses below the equivalent of SMC's MATH 127/128/150. SMC may accept an unlimited number of transfer credits, but the student will still need to follow graduation guidelines for degree completion. Students must provide an official transcript prior to enrolling in courses which require the prerequisite class they earned at the other institution. There is no grace period for providing an official transcript for prerequisite purposes. The prerequisite course from the other institution must have a final grade. In-progress courses are not sufficient for prerequisite purposes at SMC.

## Withdrawal from SMC Policy

Policy: Students who find it necessary to withdraw from SMC should make sure they understand the potential impact of the withdrawal on their financial aid before finalizing their decision. If they still wish to withdraw, the student should complete a Withdrawal Form and submit the form to the Records Office before departing campus.

Withdrawing from the college entirely can have a large financial impact on a student if done during the semester. Often times, for financial reasons, it is better to stay through the end of the semester rather than withdraw during the term. Students who withdraw from the school prior to the published add/drop date for full-length courses and early end courses will receive a full refund without a
"W" on their transcript for each course. After the add/drop deadline, students who withdraw should expect to receive a "W" for each course. Students who withdraw from the school because of unusual or unforeseen circumstances may wish to receive a financial refund and can request an exception to this policy by completing the Request for Exception for a Late Refund or a Late Withdrawal Form. Such refunds are rarely given unless in matters of student illness or medical emergency, the death of an immediate family member, or U.S. military active duty or induction. Each exception is considered by a SMC committee.

## Graduation, MTA, and General Education

## General Graduation Requirements for Associate in Arts (A.A.) and Associate in Science (A.S.) Degrees

In order to earn an A.A. degree or an A.S. degree from SMC, students must:

- Declare a program of study and adhere to a particular catalog advising year as assigned by the institution.
- Fulfill all requirements as specified on the program of study curriculum document. This will include the completion of at least 18 credits of major-specific courses, except for the General Studies major that will include the completion of at least 18 credits beyond the general education/MTA curriculum.
- Earn a cumulative Grade Point Average (GPA) of 2.0, equivalent to a " C " or higher.
- Earn a minimum grade of "C" or better in each general education course used to fulfill a general education component.
- Earn a minimum grade of "C" or better for each prerequisite course in the program of study.
- Complete a minimum of 60 credit hours, satisfying all course and credit hour requirements in an approved A.A. or A.S. curriculum.
- Earn a minimum of 30 credits from SMC or the last 15 credits from SMC. A maximum of 13 credits can be earned through SMC's Achieved Credit by Examination (ACE) process. ACE tests are written by SMC faculty and reflect the content taught in courses. Please know that credit earned by ACE testing may not transfer to other institutions.
- Take additional general elective courses, if needed, in order to reach a minimum of 60 credit hours. This is likely to occur when competency is demonstrated through testing procedures without resulting in credit for core curriculum courses.
- Understand that courses below the 100 level may not be applied toward meeting any A.A. or A.S. degree requirements. No more than four credits of PHED 101 or 103 will apply toward the A.A. or A.S. degree.
- Understand that courses above the 100 level and courses deemed as transitional courses (those that are not a part of the curriculum but lead to required courses in the curriculum) may be applied toward meeting graduation requirements. A maximum of 12 credits from transitional courses will count toward graduation requirements.

In order to graduate from SMC with an A.A. or A.S. degree, students must:

- See their advisor about completing a degree audit and a graduation application.
- Submit a graduation application the semester before they plan to finish all degree requirements.


## General Graduation Requirements for Associate in Applied Science (A.A.S.) Degrees

In order to earn an A.A.S. degree from SMC, students must:

- Declare a program of study and adhere to a particular catalog advising year as assigned by the institution.
- Fulfill all requirements as specified on the program of study curriculum document. This will include the completion of at least 24 credits of major-specific courses.
- Earn a cumulative Grade Point Average (GPA) of 2.0, equivalent to a " C " or higher.
- Earn a minimum grade of "C" or better in each general education course used to fulfill a general education component.
- Earn a grade of " C " or better for each prerequisite course in the program of study.
- Complete a minimum of 60 credit hours, satisfying all course and credit hour requirements in an approved A.A.S curriculum.
- Earn a minimum of 30 credits from SMC or the last 15 credits from SMC. A maximum of 13 credits can be earned through SMC's Achieved Credit by Examination (ACE) process. ACE tests are written by SMC faculty and reflect the content taught in courses. Please know that credit earned by ACE testing may not transfer to other institutions.
- Take additional general elective courses, if needed, in order to reach a minimum of 60 credit hours. This is likely to occur when competency is demonstrated through testing procedures without resulting in credit for core curriculum courses.
- Understand that courses below the 100 level may not be applied toward meeting any A.A.S. degree requirements. No more than four credits of PHED 101 or 103 will apply toward the A.A.S. degree.
- Understand that courses above the 100 level and courses deemed as transitional courses, those that are not a part of the curriculum but lead to required courses in the curriculum, may be applied toward meeting graduation requirements. A maximum of 12 credits from transitional courses will count toward graduation requirements.

In order to graduate from SMC with an A.A.S. degree, students must:

- See their advisor about completing a degree audit and a graduation application.
- Submit a graduation application the semester before they plan to finish all degree requirements.


## General Graduation Requirements for Certificate Programs

In order to earn a certificate from SMC, students must:

- Declare the certificate as their program of study and adhere to a particular catalog advising year as assigned by the institution.
- Earn a cumulative Grade Point Average (GPA) of 2.0, equivalent to a " C " or higher.
- Earn a minimum grade of " $C$ " for each general education course in the certificate program, as applicable per the specific program of study.
- Earn a grade of "C" or better for each prerequisite course in the program of study.
- Satisfy at least 28 total credit hours of specific instruction as listed on the approved program curriculum sheet.
- Satisfy all course requirements of the certificate as listed on the approved program curriculum sheet, even if more than 28 credits are listed.
- Complete at least 15 overall credit hours of the certificate at SMC or complete at least the last 8 credits of the certificate program from SMC. A maximum of 12 of the 15 credits or 5 of the last 8 credits can be earned through SMC's Achieved Credit by Examination (ACE) process. ACE tests are written by SMC faculty and reflect the content taught in courses. Please know that credit earned by ACE testing may not transfer to other institutions.
- Take additional general elective courses, if needed, in order to reach the minimum number of credit hours. This is likely to occur when competency is demonstrated through testing procedures without resulting in credit for core curriculum courses.
- Understand that courses below the 100 level may not be applied toward meeting certificate or graduation requirements.

In order to graduate from SMC with a certificate, students must:

- See their advisor about completing a program audit and a graduation application.
- Submit a graduation application the semester before they plan to finish all certificate requirements.


## General Graduation Requirements for the Small Business Management/Entrepreneurship Specialty Certificate Program

In order to earn this specialty certificate from SMC, students must:

- Declare the specialty certificate as their program of study and adhere to a particular catalog advising year as assigned by the institution.
- Earn a cumulative Grade Point Average (GPA) of 2.0, equivalent to a " C " or higher, unless department's guideline is more stringent.
- Satisfy all course and credit requirements as specified on the approved program curriculum sheet.
- Earn at least $50 \%$ of the total required credits for the specialty certificate through SMC. At least $80 \%$ of the minimum required credits through SMC can be earned by taking the Achieved Credit by Examination (ACE). ACE tests are written by SMC faculty and reflect the content taught in courses. Please know that credit earned by ACE testing may not transfer to other institutions.
- Take additional general elective courses, if needed, in order to reach the minimum number of credit hours. This is likely to occur when competency is demonstrated through testing procedures without resulting in credit for core curriculum courses.
- Understand that courses below the 100 level may not be applied toward meeting certificate or graduation requirements.

In order to graduate from SMC with this specialty certificate, students must:

- See their advisor about completing a program audit and a graduation application.
- Submit a graduation application the semester before they plan to finish all certificate requirements.


## Guidelines for Completion of Other Specialty Certificate and Credential Programs

In order to earn a specialty certificate (other than the small business management/entrepreneurship certificate) or special credential from SMC, students must:

- Adhere to all information as outlined on the program curriculum page of this catalog (see specific program page) and any additional regulations as specified by the department in which the program resides.

Students in these programs are considered "completers" and not graduates of SMC. Therefore, these students are not required to fill out a graduation application for their program.

## Michigan Transfer Agreement (MTA)

The Michigan Transfer Agreement (MTA) is designed to facilitate the transfer of general education requirements between participating Michigan institutions. The agreement provides for the transferability of a block of core requirements. Students are encouraged to complete the MTA as a part of an associate degree but may achieve the distinction without completing a degree. At SMC, most Associate in Arts and all Associate in Science degrees facilitate the completion of the MTA requirements. Some Associate in Applied Science degrees at SMC also facilitate the completion of the MTA, but many more do not because the A.A.S. curriculum, by design, is more focused on helping students move toward employment opportunities rather than transferability.

To secure the MTA stamp of approval from SMC, students must: complete a minimum of 30 MTA-approved credit hours, achieve a minimum grade of "C" for each approved course, and earn at least one of these MTA-approved courses through SMC. Students cannot use CLEP Exam scores to fulfill MTA requirements. The specific courses that meet MTA standards for the 2020-2021 academic year are listed below. Consult your advisor for changes or specific details.

## ENGLISH COMPOSITION (1 course from the following options)

- ENGL 103 or ENGL 103W


## ENGLISH COMPOSITION OR COMMUNICATIONS (1 course from the following options)

- ENGL 104
- SPEE 102
- SPEE 104


## MATHEMATICS (1 course from the following options)

- MATH 127, 128, 129, 130, 141, 142, 150, 201, 203, 205


## NATURAL SCIENCE ( 2 courses from the following options)

Coursework must be from more than one subject area. At least one course must contain a lab.

- BIOL 101, 102, 110, 118, 202, 214, 215
- BISC 111
- CHEM 100, 101, 102, 201, 202
- ENST 112
- GEOG 110
- PHYS 101, 102, 201, 202


## SOCIAL SCIENCE ( 2 courses from the following options)

Coursework must be from more than one subject area.

- ECON 201, 202
- EDUC 215
- HIST 201, 202, 230, 248, 290
- POSC 201
- PSYC 101, 102, 260, 296
- SOCI 201, 202, 203


## HUMANITIES (2 courses from the following options)

## Coursework must be from more than one subject area.

- ART 110, 200, 203, 204
- BDWI 101, 201
- ENGL 231, 232, 235, 251, 261, 263, 265, 282
- HIST 101, 102
- HUMA 202, 204, 205, 210
- MUSI 101, 102, 110, 201, 202, 203, 204
- PHIL 101, 201, 210, 220, 280
- SOCI 240
- SPAN 101, 102, 201, 202
- THEA 110


## General Education Requirements

All curricula at SMC include a set of instructional values that we believe are an integral part of any higher education experience. These values include understanding and valuing cultural and global diversity, being able to work effectively as part of a team, and thinking critically and solving problems. The college strives to embed these values into our courses and other college experiences through enculturation and professional development of faculty and staff, faculty training in appropriate pedagogical strategies and the incorporation of these principles into multiple extracurricular experiences.

The structure of SMC's general education requirements are presented below. Associate in Arts and Associate in Science degrees require students to satisfy courses in each of the following categories: English Composition, English Composition or Communication, Mathematics, Natural Science, Social Science, and Humanities. Associate in Applied Science degrees may require students to fulfill courses from one or more of these same categories, while certificate programs may or may not have a general education course as a part of completion requirements. Each course that counts toward the general education component of a degree or certificate program must be completed with a minimum grade of "C".

## ENGLISH COMPOSITION (1 course from the following options)

- ENGL 103 or ENGL 103W


## ENGLISH COMPOSITION OR COMMUNICATIONS (1 course from the following options)

- ENGL 104
- SPEE 102
- SPEE 104


## MATHEMATICS (1 course from the following options)

- MATH 127, 128, 129, 130, 141, 142, 150, 201, 203, 205


## NATURAL SCIENCE ( 2 courses from the following options)

Coursework must be from more than one subject area. At least one course must contain a lab.

- BIOL 101, 102, 110, 118, 202, 214, 215
- BISC 111
- CHEM 100, 101, 102, 201, 202
- ENST 112
- GEOG 110
- PHYS 101, 102, 201, 202
- SCIE 190


## SOCIAL SCIENCE ( 2 courses from the following options)

## Coursework must be from more than one subject area.

- ECON 201, 202
- EDUC 215
- HIST 201, 202, 230, 248, 290
- POSC 201
- PSYC 101, 102, 260, 296
- SOCI 201, 202, 203


## HUMANITIES (2 courses from the following options)

## Coursework must be from more than one subject area.

- ART 110, 200, 203, 204
- BDWI 101, 201
- ENGL 231, 232, 235, 251, 261, 263, 265, 282
- HIST 101, 102
- HUMA 202, 204, 205, 210
- MUSI 101, 102, 110, 201, 202, 203, 204
- PHIL 101, 201, 210, 220, 280
- SOCI 240
- SPAN 101, 102, 201, 202
- THEA 110


## General Education Guidelines for Associate in Arts Degree Programs

The general education requirements for an Associate in Arts degree differ from those of any other degree. Please familiarize yourself with these guidelines if you wish to pursue an A.A. degree. Course numbers listed below are approved general education courses and may be substituted for courses listed in a specific A.A. degree program. Please consult an advisor for guidance.

## COMMUNICATIONS (6 to 7 credits required)

A minimum grade of "C" is required in each course taken below. Students must complete at least one English class. Students are urged to take 9 total credits from this section, specifically ENGL 103, ENGL 104, and one speech course.

- ENGL 103 or ENGL 103W
- ENGL 104 or SPEE 102 or SPEE 104


## MATHEMATICS ( 3 to 5 credits required)

A minimum grade of " C " is required.

- MATH 127, 128, 129, 130, 141, 142, 150, 201, 203, 205


## NATURAL SCIENCE (8 to $\mathbf{1 0}$ credits required)

A minimum grade of " $C$ " is required in each course taken below. Students must complete at least one lab course, and choices in this category must be from more than one subject area.

- BISC 111
- BIOL 101, 102, 110, 118, 202, 214, 215
- CHEM 100, 101, 102, 201, 202
- ENST 112
- GEOG 110
- PHYS 101, 102, 201, 202
- SCIE 190


## SOCIAL SCIENCE (6 credits required)

A minimum grade of " $C$ " is required in each course taken below. Students must complete courses from more than one subject area.

- ECON 201, 202
- EDUC 215
- HIST 201, 202, 230, 248, 290
- POSC 201
- PSYC 101, 102, 260, 296
- SOCI 201, 202, 203


## HUMANITIES ( 6 to 8 credits required)

A minimum grade of " $C$ " is required in each course taken below. Students must complete courses from more than one subject area.

- ART 110, 200, 203, 204
- BDWI 101, 201
- ENGL 231, 232, 235, 251, 261, 263, 265, 282
- HIST 101, 102
- HUMA 202, 204, 205, 210
- MUSI 101, 102, 110, 201, 202, 203, 204
- PHIL 101, 201, 210, 220, 280
- SOCI 240
- SPAN 101, 102, 201, 202
- THEA 110


## General Education Guidelines for Associate in Science Degree Programs

The general education requirements for an Associate in Science degree differ from those of any other degree. Please familiarize yourself with these guidelines if you wish to pursue an A.S. degree. Course numbers listed below are approved general education courses and may be substituted for courses listed in a specific A.S. degree program. Please consult an advisor for guidance.

## COMMUNICATIONS (6 to 7 credits required)

A minimum grade of " $C$ " is required in each course taken below. Students must complete at least one English class. Students are urged to take 9 total credits from this section, specifically ENGL 103, ENGL 104, and one Speech course.

- ENGL 103 or ENGL 103W
- ENGL 104 or SPEE 102 or SPEE 104


## MATHEMATICS (3 to 5 credits required)

A minimum grade of " C " is required.

- MATH 130, 141, 142, 201, 203, 205


## NATURAL SCIENCE AND/OR MATHEMATICS (20 credits required)

A minimum grade of " C " is required in each course taken below. Students must complete at least two science courses from different disciplines (at least one science course must have a lab component). Students must choose at least 15 credits from the science block of choices below and may choose no more than 5 credits from the second block of choices below.

- SCIENCE BLOCK (15-20 credits)
- BIOL 101, 102, 118, 202, 214, 215
- CHEM 101, 102, 201, 202
- PHYS 101, 102, 201, 202
- MATH/SCIENCE BLOCK (0-5 credits maximum)
- BIOL 110, BISC 111, CHEM 100
- ENST 112, GEOG 110
- MATH 127, 129, 130, 141, 142, 150, 201, 203, 205


## SOCIAL SCIENCE (6 credits required)

A minimum grade of " $C$ " is required in each course taken below. Students must complete courses from more than one subject area.

- ECON 201, 202
- EDUC 215
- HIST 201, 202, 230, 248, 290
- POSC 201
- PSYC 101, 102, 260, 296
- SOCI 201, 202, 203


## HUMANITIES (6 to 8 credits required)

A minimum grade of " $C$ " is required in each course taken below. Students must complete courses from more than one subject area.

- ART 110, 200, 203, 204
- BDWI 101, 201
- ENGL 231, 232, 235, 251, 261, 263, 265, 282
- HIST 101, 102
- HUMA 202, 204, 205, 210
- MUSI 101, 102, 110, 201, 202, 203, 204
- PHIL 101, 201, 210, 220, 280
- SOCI 240
- SPAN 101, 102, 201, 202
- THEA 110


## Associate in Arts Degree Programs

## To earn an A.A. degree in any A.A. program, students must:

- Complete the General Education Guidelines for Associate in Arts Degree Programs (p.33)
- Earn a grade of "C" or better in each course approved for the "General Education and MTA Courses" section on the program page.
- Earn a grade of "C" or better in each internship or capstone course (if applicable to the program requirements).
- Earn a grade of "C" or better in each prerequisite course in the program. Review the Course Descriptions (pp.147-207) to understand prerequisite requirements.
- Earn a minimum of 18 major-specific credits to achieve the major credential (see Major-specific Required Courses section of each program curriculum in the pages to follow). Some majors require more than 18 credits to earn the credential. Students who fail to satisfy all major-specific requirements but who achieve all other degree requirements can be awarded the A.A. General Studies degree.
- Earn a minimum of 60 credits with a minimum cumulative GPA of 2.0.
- Submit a graduation application, preferably the semester before finishing all degree requirements.
- Adhere to the rest of the guidelines provided in the Graduation Requirements section for A.A. degrees (p.29).


## Associate in Arts in Business

## Program Outcomes

Upon completion of this degree, students will have experienced a well-rounded general education meeting the requirements of the MiTransfer Pathway for business. More information about the MiTransfer Pathway for business can be found at mitransfer.org.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare for transfer to four-year institutions to continue their pursuit of a bachelor's degree in a variety of business-related fields.

## To Learn More About This Program

Contact Jane Mitchell at 269-782-1218 or jmitchell@swmich.edu or James Benak at 269-782-1221 or jbenak@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| HUMA 210 | Intro to Non-Western <br> Civilization | 4 credits |

Total Program Credits: 61

College-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BUSI 200 | Small Business <br> Management | 3 credits |

MiTransfer Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ACCO 201 | Principles of Accounting 1 | 4 credits |
| ACCO 202 | Principles of Accounting 2 | 4 credits |
| BUSI 207 | Business Law 1 | 3 credits |
| ECON 201 | Macroeconomics | 3 credits |
| ECON 202 | Microeconomics | 3 credits |

Suggested Elective Courses ${ }^{1}$ Choose 9 credits

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BUSI 201 | Principles of Management | 3 credits |
| BUSI 208 |  |  |
| BUSI 210 | Business Law 2 | 3 credits |
| BUSI 212 | Personal Finance | 3 credits |
| BUSI 214 | Supervision | 3 credits |
| BUSI 220 | Marketing | 3 credits |
| BUSI 221 | Advertising | 3 credits |
| BUSI 225 | Human Resource <br> Management | 3 credits |

## Notes:

${ }^{1}$ The selection of elective courses shall be made in conjunction with an advisor and by reviewing the transfer requirements of the four-year institution.

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## Additional Notes About the A.A. in Business Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 <br> Educational Exploration <br> and Planning <br> ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) <br> ACCO 201 Principles of Accounting 1 <br> BUSI 200 Small Business <br> Management | 3 credit 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 207 Business Law 1 | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 102 Fundamentals of Public |  |  |
| Speaking |  |  |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ACCO 202 Principles of Accounting 2 | 4 credits | ACCO 201 |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Elective | 3 credits | See Course Description for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |
| ENST 112 Environmental Science | 4 credits | None |
| Elective | 3 credits | See Course Description for Details |
| Elective | 3 credits | See Course Description for Details |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ECON 201 Macroeconomics | 3 credits | MATH 101, MATH 102, or test score |
| GEOG 110 Physical Geography | 4 credits | None |
| HUMA 210 Intro to Non-Western Civilization | 4 credits | ENGL 103 or ENGL 103W |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## Associate in Arts in Communications

## Program Outcomes

Upon completion of this degree, students will be able to deliver messages appropriate to a variety of specific audiences and understand the role effective communication plays in human relationships across social and cultural contexts. Students will be introduced to key theoretical approaches within the field of communications and apply those theories across various contexts, including managing conflicts, working collaboratively with others, active listening, etc.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to a four-year institution to continue their pursuit of a bachelor's degree in a variety of communications-related fields. Please contact your advisor frequently to utilize your course electives in this program wisely.

## To Learn More About This Program

Contact Daniel Johnson at 269-782-1295 or djohnson17@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID Course Credits <br> ENGL 103 or <br> ENGL 103W Freshman English 2 (or with <br> workshop) 3 to 4 <br> credits <br> ENGL 104 Freshman English 3 3 creditsMATHEMATICS <br> Course ID$\quad$Credits <br> MATH 128 Contemporary Mathematics |
| :--- |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| COMM 110 | Introduction to Mass <br> Communication | 3 credits |
| COMM 115 | Writing for Mass Media | 3 credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |
| SPEE 104 | Intro to Human <br> Communication | 3 credits |

## NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits | | HUMANITIES |
| :---: |

Complete at least 6 credits from the courses below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BUSI 200 | Small Business Management | 3 credits |
| BUSI 214 | Business Communications | 3 credits |
| ENGL 231 | American Literature 1 | 3 credits |
| ENGL 232 | American Literature 2 | 3 credits |
| ENGL 235 | American Ethnic Literature | 3 credits |
| ENGL 263 | Creative Writing/Poetry | 3 credits |
| ENGL 265 | Creative Nonfiction Writing | 3 credits |
| ENGL 282 | Survey of British Literature 2 | 3 credits |
| SLP 110 | Introduction to Speech <br> Language Pathology | 2 credits |

Total Program Credits: 50
(Need 60 credits to graduate)

## Additional Notes About the A.A. in Communications Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- The program shown on the previous page does not provide a student with all 60 credits needed to earn a degree. Students will need to take additional courses to reach 60 total credits. Many more credits can be taken in the areas of communications, English, literature, and writing.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

## FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| COMM 110 Introduction to Mass <br> Communication | 3 credits | ENGL 103 or ENGL 103W (concurrent enrollment allowed) |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| GEOG 110 Physical Geography | 4 credits | None |
| SPEE 102 Fundamentals of Public <br> Speaking | 3 credits | None |
| General or Program Elective <br> (if needed) | 3 credits | See Course Descriptions for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| HUMA 210 Intro to Non-Western Civilization | 4 credits | ENGL 103 or ENGL 103W |
| SPEE 104 Intro to Human Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENST 112 Environmental Science | 4 credits | None |
| Program Elective | 3 credits | See Course Descriptions for Details |
| General or Program Elective (if needed) | 3 credits | See Course Descriptions for Details |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| COMM 115 Writing for Mass Media | 3 credits | ENGL 103 or ENGL 103W (concurrent enrollment allowed) |
| Program Elective | 3 credits | See Course Descriptions for Details |
| General or Program Elective <br> (if needed) | 3 credits | See Course Descriptions for Details |
| General or Program Elective <br> (if needed) | 3 credits | See Course Descriptions for Details |

## Associate in Arts in Creative Writing

## Program Outcomes

Upon completion of this degree, students will hone their creative and academic writing skills, develop their unique writing voice, and engage critically with creative texts from the fiction, creative nonfiction, and poetry genres. Students will also develop the analytical and critical thinking skills necessary for effective discussion of literature and gain an understanding of core elements of a writer's craft.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to a four-year institution to continue their pursuit of a bachelor's degree in creative writing or related fields. Please contact your advisor frequently to utilize your course electives in this program wisely.

## To Learn More About This Program

Contact Hailey Sheets at 269-782-1289 or hsheets@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits | | MATHEMATICS |
| :---: |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 261 | Creative Writing/Fiction | 3 credits |
| HUMA 210 | Intro to Non-Western <br> Civilization | 4 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ENGL 263 | Creative Writing/Poetry | 3 credits |
| ENGL 265 | Creative Nonfiction Writing | 3 credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |
| SPEE 104 | Intro to Human <br> Communication | 3 credits |

Complete at least 6 credits from the courses below

| Course ID | Course |  |
| :---: | :---: | :---: |
| ENGL 231 | American Literature 1 | 3 credits |
| ENGL 232 | American Literature 2 | 3 credits |
| ENGL 235 | American Ethnic Literature | 3 credits |
| ENGL 282 | Survey of British Literature 2 | 3 credits |
| HUMA 204 | Introduction to Film | 3 credits |

## Additional Notes About the A.A. in Creative Writing Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- The program shown on the previous page does not provide a student with all 60 credits needed to earn a degree. Students will need to take additional courses to reach 60 total credits. Many more credits can be taken in the areas of communications, English, literature, and writing.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

## FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " ${ }^{\prime \prime}$ " Required) |
| :---: | :---: | :---: |
| ENGL 263 Creative Writing/Poetry | 3 credits | None |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| GEOG 110 Physical Geography | 4 credits | None |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |
| Program Elective | 3 credits | See Course Descriptions for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| HUMA 210 Intro to Non-Western Civilization | 4 credits | ENGL 103 or ENGL 103W |
| Program Elective | 3 credits | See Course Descriptions for Details |
| ENST 112 Environmental Science | 4 credits | None |
| General or Program Elective (if needed) | 3 credits | See Course Descriptions for Details |
| General or Program Elective (if needed) | 3 credits | See Course Descriptions for Details |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 104 Intro to Human <br> Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 265 Creative Nonfiction Writing | 3 credits | None |
| General or Program Elective <br> (if needed) | 3 credits | See Course Descriptions for Details |
| General or Program Elective <br> (if needed) | 3 credits | See Course Descriptions for Details |

## Associate in Arts in Elementary Education

## Program Outcomes

Upon completion of this degree, students will have gained a well-rounded general education degree with a focus on the foundational learning principles important to becoming a successful classroom teacher.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to many schools that offer education programs. SMC has a partnership with Ferris State University, and that track is listed below. Another track is provided which guides students for transfer to many other colleges or universities. Students should consult frequently with their advisor about their educational goals, as each school has different transfer practices. Therefore, the selection of your courses at SMC is important to provide not only the best educational experience here, but the most profitable upon transfer.

## To Learn More About This Program

Contact Ranee Conley at 269-783-2116 or rconley@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |

## MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 127 | College Algebra | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BISC 111 | Biological Science | 4 credits |
| SCIE 190 | Earth Science for <br> Elementary Teachers | 3 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| HIST 201 | United States History 1 | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 200 | Creative Process Through <br> Art | 3 credits |
| ENGL 251 | Children's Literature | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| EDUC 101 | Introduction to Teaching | 1 credit |
| MATH 153 | Math for Elementary Teachers 1 | 4 credits |
| MATH 154 | Math for Elementary Teachers 2 | 4 credits |
| MUSI 240 | Music for the Classroom Teacher | 3 credits |
| POSC 201 | American Government | 3 credits |
| SPEE 102 | Fundamentals of Public Speaking | 3 credits |

Complete either the Ferris State University Transfer Track or the General Transfer Education Track listed below.

FERRIS STATE UNIVERSITY TRACK

| Course ID |  | Course |
| :---: | :---: | :---: |
| ECON 201 | Macroeconomics | Credits |
| EDUC 260 | Emergent Literacy | 3 credits |
| HIST 230 | Michigan History | 3 credits |
| PSYC 296 | Educational Psychology | 3 credits |
| EDUC 215 or <br> MATH 141 or <br> MATH 265 | Human Dev and Learning or <br> Analytical Geometry and Calculus <br> 1 or Probability and Statistics for <br> Teachers | 3 to 5 <br> credits |

GENERAL TRANSFER EDUCATION TRACK

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 215 | Human Dev and Learning | 3 credits |
| HIST 202 | United States History 2 | 3 credits |
| MATH 265 | Prob and Stats for Teachers | 4 credits |
| PHED 103 | Life Wellness | 2 credits |
| PSYC 205 or <br> PSYC 296 | Child Psychology or Educational <br> Psychology | 3 credits |

## Additional Notes About the A.A. in Elementary Education Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need one additional natural science course because SCIE 190 satisfies the A.A. general education requirements but not MTA. See advisor for specific details if the MTA is important to you.
- This program outlines two different tracks, one for preparation to transfer to Ferris State University and one for preparation to transfer to other colleges and universities. Please consult with an advisor regularly about your specific educational goals.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 <br> Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| HIST 201 United States History 1 | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 127 College Algebra | 4 credits | MATH 101 or test score |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| EDUC 101 Introduction to Teaching | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| SCIE 190 Earth Science for <br> Elementary Teachers | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Track Elective | 2 to 5 credits | See Course Descriptions for Details |
| Track Elective | 2 to 5 credits | See Course Descriptions for Details |
| Track Elective | 2 to 5 credits | See Course Descriptions for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |
| MATH 153 Math for Elementary Teachers 1 | 4 credits | MATH 101, MATH 102, or test score |
| MUSI 240 Music for the Classroom Teacher | 3 credits | None |
| BISC 111 Biological Science | 4 credits | None |
| POSC 201 American Government | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 200 Creative Process Through Art | 3 credits | None |
| MATH 154 Math for Elementary Teachers 2 | 4 credits | MATH 153 |
| ENGL 251 Children's Literature | 3 credits | None |
| Track Elective | 2 to 5 credits | See Course Descriptions for Details |
| Track Elective | 2 to 5 credits | See Course Descriptions for Details |

## Associate in Arts in English Literature

## Program Outcomes

Upon completion of this degree, students will have been exposed to and demonstrated a knowledge of major and minor authors and literary texts from the United States, Europe, and abroad. They will hone their reading and writing skills in analysis, interpretation, and research. Lastly, they will develop a greater appreciation for literature and the role it plays in shaping and reflecting culture.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to a four-year institution to continue their pursuit of a bachelor's degree in literature or related fields. Please contact your advisor frequently to utilize your course electives in this program wisely.

## To Learn More About This Program

Contact Hailey Sheets at 269-782-1289 or hsheets@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or | Freshman English 2 (or with <br> ENGL 103W | 3 to 4 <br> workshop) |
| ENGL 104 | Freshman English 3 | 3 credits | | MATHEMATICS |
| :---: |
| Course ID |

## NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| HUMA 210 | Intro to Non-Western <br> Civilization | 4 credits |

Total Program Credits: 56 (Need 60 credits to graduate)

## Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ENGL 232 | American Literature 2 | 3 credits |
| ENGL 231 or <br> ENGL 235 | American Literature 1 or <br> American Ethnic Literature | 3 credits |
| ENGL 261 | Creative Writing/Fiction | 3 credits |
| ENGL 282 | Survey of British Literature 2 | 3 credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |
| SPEE 104 | Intro to Human <br> Communication | 3 credits |

Complete at least $\mathbf{6}$ credits from the courses below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 251 | Children's Literature | 3 credits |
| ENGL 263 | Creative Writing/Poetry | 3 credits |
| ENGL 265 | Creative Nonfiction Writing | 3 credits |
| HUMA 204 | Introduction to Film | 3 credits |

## Additional Notes About the A.A. in English Literature Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- The program shown on the previous page does not provide a student with all 60 credits needed to earn a degree. Students will need to take additional courses to reach 60 total credits. Many more credits can be taken in the areas of communications, English, literature, and writing.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and <br> Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 261 Creative Writing/Fiction | 3 credits | None |
| MATH 128 Contemporary Mathematics | 4 credits | MATH 101, MATH 102, or test score |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 232 American Literature 2 or <br> ENGL 282 Survey of British Literature 2 | 3 credits | ENGL 103 or ENGL 103W |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| GEOG 110 Physical Geography | 4 credits | None |
| SPEE 102 Fundamentals of Public | 3 credits | None |
| Speaking | 3 credits | See Course Descriptions for Details |
| Program Elective |  |  |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| HUMA 210 Intro to Non-Western Civilization | 4 credits | ENGL 103 or ENGL 103W |
| ENGL 231 American Literature 1 or ENGL 235 American Ethnic Literature | 3 credits | ENGL 103 or ENGL 103W |
| ENST 112 Environmental Science | 4 credits | None |
| Program Elective | 3 credits | See Course Descriptions for Details |
| General or Program Elective (if needed) | 3 credits | See Course Descriptions for Details |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 104 Intro to Human Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 232 American Literature 2 or ENGL 282 Survey of British Literature 2 | 3 credits | ENGL 103 or ENGL 103W |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| General or Program Elective (if needed) | 3 credits | See Course Descriptions for Details |

## Associate in Arts in Entrepreneurship

## Program Outcomes

Upon completion of this degree, students will have gained a well-rounded general education degree, including a concentration in an area that the student selects. The student can use this program to learn how to run and operate their own business.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare for transfer to a four-year institution to complete a bachelor's degree. Students should work directly with an academic advisor to determine specific course requirements at the receiving institution prior to selecting options/electives.

## To Learn More About This Program

Contact Leon Letter at 269-782-1215 or Iletter@swmich.edu or James Benak at 269-782-1221 or jbenak@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> $103 W$ | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 102 or <br> SPEE 104 | Fundamentals of Public <br> Speaking or Intro to Human <br> Communication | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ECON 202 | Microeconomics | 3 credits |
| PSYC 101 | General Psychology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| HUMA 210 | Intro to Non-Western <br> Civilization | 4 credits |

## Additional Notes About the A.A. in Entrepreneurship Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Students are strongly encouraged to use program electives in a specific discipline. Examples may include 15 or more credits in Music, Psychology, Science, English, Auto Technology, Health, Business, or other fields.
- Major-specific program electives must be distinct (not duplicated) with general education and MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

## FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ACCO 201 Principles of Accounting 1 | 4 credits | BUSI 200 (concurrent enrollment allowed) |
| BUSI 200 Small Business Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 102 Fundamentals of Public Speaking or SPEE 104 Intro to Human Communication | 3 credits | SPEE 102: None <br> SPEE 104: ENGL 115 or test score (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 210 Personal Finance | 3 credits | None |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 220 Marketing | 3 credits | BUSI 200 or permission of appropriate Dean; BUSI 214 recommended |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| Elective | 3 credits | See Course Descriptions for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |
| ENST 112 Environmental Science | 4 credits | None |
| Elective | 3 credits | See Course Descriptions for Details |
| Elective | 3 credits | See Course Descriptions for Details |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| GEOG 110 Physical Geography | 4 credits | None |
| HUMA 210 Intro to Non-Western Civilization | 4 credits | ENGL 103 or ENGL 103W |
| Elective | 3 credits | See Course Descriptions for Details |
| Elective | 3 credits | See Course Descriptions for Details |

## Associate in Arts in General Studies

## Program Outcomes

Upon completion of this degree, students will have gained further understanding of valuing cultural and global diversity, being able to work effectively as part of a team, and thinking critically to solve problems.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to a four-year institution to continue their pursuit of a bachelor's degree in a variety of fields. Please contact your advisor frequently to utilize your course selection options wisely.

## To Learn More About This Program

Contact the Office of First Year Experience at 269-782-1499 or fye@swmich.edu or the Academic Advising and Resource Center at 269-782-1303 or askanadvisor@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or ENGL 103W | Freshman English 2 (or with workshop) | 3 to 4 credits |
| ENGL 104 or SPEE 102 or SPEE 104 | Freshman English 3 or Fundamentals of Public Speaking or Intro to Human Communication | 3 credits |

## MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 127 or | College Algebra or |  |
| MATH 128 or | Contemporary Mathematics | 4 credits |
| MATH 150 or |  |  |
| higher level | or Statistics or higher level |  |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| HUMA 210 | Intro to Non-Western <br> Civilization | 4 credits |

## Additional Notes About the A.A. in General Studies Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- The program shown on the previous page does not provide a student with all 60 credits needed to earn a degree. Students will need to take additional courses to reach 60 total credits.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $C^{\prime \prime}$ Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 127 College Algebra or <br> MATH 128 Contemporary <br> Mathematics or MATH 150 Statistics <br> or higher level | 4 credits | MATH 127: MATH 101 or test score |
| PSYC 101 General Psychology | 3 credits | MATH 128: MATH 101, MATH 102, or test score <br> MATH 150: MATH 101, MATH 102, or test score |
| General Elective | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| GEOG 110 Physical Geography | 4 credits | None |
| ENGL 104 Freshman English 3 or <br> SPEE 102 Fundamentals of Public <br> Speaking or SPEE 104 Intro to <br> Human Communication | 3 credits | ENGL 104: ENGL 103 or ENGL 103W |
| General Elective | 3 credits | SPEE 104: ENGL 115 or test score |
| General Elective | 3 credits | See Course Descriptions for Details |
| General Elective | 3 credits | See Course Descriptions for Details |
|  | See Course Descriptions for Details |  |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $C^{\prime \prime}$ Required) |
| :---: | :---: | :---: |
| ENST 112 Environmental Science | 4 credits | None |
| HUMA 210 Intro to Non-Western | 4 credits | ENGL 103 or ENGL 103W |
| Civilization | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ART 110 Art Appreciation | 3 credits | See Course Descriptions for Details |
| General Elective | 3 credits | See Course Descriptions for Details |
| General Elective |  |  |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| General Elective | 3 credits | See Course Descriptions for Details |
| General Elective | 3 credits | See Course Descriptions for Details |
| General Elective | 3 credits | See Course Descriptions for Details |
| General Elective | 3 credits | See Course Descriptions for Details |

## Associate in Arts in Graphic Design

## Program Outcomes

Upon completion of this degree, students will have experienced an orientation to contemporary systems of visual communication and client-driven design-based practices. The progressive sequence of courses encourages targeted investigations into both print- and web-based design solutions. Student will foster habits of mind conducive to building a creative and active learning community. The program promotes curiosity, flexibility, and openness to new information systems and approaches to learning in the service of creating expansive and enhanced spaces for persistence, engagement, and shared responsibility for the success of the curriculum.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to four-year institutions to continue their studies in graphic design or a related field or prepare for work in art, design, illustration, or related fields. Please work closely with your advisor to ensure proper course selection for the transfer school of your choice.

## To Learn More About This Program

Contact Sam Walker at 269-783-2109 or swalker01@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 128 | Contemporary Mathematics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

## HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 203 | Art History 1 | 3 credits |
| HUMA 202 | Introduction to American <br> Pop Culture | 3 credits |

## Additional Notes About the A.A. in Graphic Design Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ART 100 Introduction to Digital Art and Design | 3 credits | Basic Computer Literacy |
| ART 101 Two-Dimensional Design | 3 credits | None |
| ART 102 Drawing 1 | 4 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or 103W |
| ART 105 Photographic Design or ART |  |  |
| 225 Digital Photography | 3 credits | ART 105: None |
| ART 204 Art History 2 | 3 credits | ART 225: ART 100 |
| ART 213 Typography in Design | 3 credits | ART 100; ART 101 (concurrent enrollment allowed) |
| MATH 128 Contemporary |  |  |
| Mathematics |  |  |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| GEOG 110 Physical Geography | 4 credits | None |
| ART 219 Graphic Design 1 | 3 credits | ART 213 |
| ART 230 Digital Publishing | 3 credits | ART 100 |
| HUMA 202 Intro to American Pop |  |  |
| Culture | 3 credits | ENGL 103 or ENGL 103W |
| ART 203 Art History 1 | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 220 Graphic Design 2 | 3 credits | ART 219 |
| ART 265 Portfolio Production | 3 credits | ART 219; concurrent enrollment in ART 220 required |
| ENST 112 Environmental Science | 4 credits |  |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## Associate in Arts in Health Services

## Program Outcomes

Upon completion of this degree, students will have experienced a solid introduction to health services and biological fundamentals that will propel them to success in future programs of study.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare for transfer to a four-year institution to continue their pursuit of a bachelor's degree in a variety of health-related fields. Students should work closely with their advisor to ensure proper course selection for the transfer school of their choice. Students who start in this Health Services program and are interested in the Nursing program should contact an advisor in the Academic Advising and Resources Center (AARC) at 269-782-1303 for information.

## To Learn More About This Program

Contact Anna Norris at 269-782-1254 or anorris@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID Course Credits <br> ENGL 103 or <br> ENGL 103W Freshman English 2 (or with <br> workshop) 3 to 4 <br> credits <br> ENGL 104 Freshman English 3 3 creditsMATHEMATICS <br> Course ID$\quad$Course |
| :--- |
| MATH 150 |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 214 | Basic Human Anatomy | 4 credits |
| CHEM 100 | Fundamentals of Chemistry | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 215 | Human Development and <br> Learning | 3 credits |
| PSYC 101 | General Psychology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HUMA 210 | Intro to Non-Western <br> Civilization | 4 credits |
| PHIL 210 or <br> PHIL 280 | Introduction to Ethics or <br> Biomedical Ethics | 4 credits |

Total Program Credits: 59 (Need 60 credits to graduate)

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BIOL 202 | Microbiology | 4 credits |
| BIOL 215 | Principles of Human <br> Physiology | 4 credits |
| HEED 101 | Medical Terminology | 3 credits |
| HEED 118 | Intro to Health Care <br> Systems | 1 credit |
| HEED 163 | Nutrition | 2 credits |
| PHED 101 | Physical Education Activity | 1 credit |
| PHED 103 | Life Wellness | 2 credits |
| PSYC 260 | Abnormal Psychology | 3 credits |
| SOCI 240 | Minority Groups in America | 3 credits |
| SPEE 104 | Intro to Human <br> Communication | 3 credits |

## Additional Notes About the A.A. in Health Services Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Students who start in this Health Services program and are interested in the Nursing program should contact an advisor in the Academic Advising and Resources Center (AARC) at 269-782-1303 for information.
- Some students in this program may need to add an additional elective course to reach 60 total credits for degree completion.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and <br> Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CHEM 100 Fundamentals of Chemistry | 4 credits | MATH 101, MATH 102, or test score (concurrent enrollment allowed); ENGL 115 |
| or test score (concurrent enrollment allowed) |  |  |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 214 Basic Human Anatomy | 4 credits | BIOL 098, BIOL 101, BIOL 110, BIOL 202, BISC 111, or one year of high school <br> biology with minimum grade of B taken within the last 5 years, or test score |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " C " Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| EDUC 215 Human Development and Learning | 3 credits | PSYC 101 |
| BIOL 215 Principles of Human Physiology | 4 credits | BIOL 214; CHEM 100, or one year of high school chemistry with minimum grade of B taken within the last 5 years, or test score |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| HEED 118 Intro to Health Care Syst. | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BIOL 202 Microbiology | 4 credits | CHEM 100, or one year of high school chemistry with minimum grade of B <br> taken within the last 5 years, or test score; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |
| HUMA 210 Intro to Non-Western |  |  |
| Civilization |  |  |$\quad 4$ credits $\quad$ ENGL 103 or ENGL 103W

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHIL 210 Introduction to Ethics or <br> PHIL 280 Biomedical Ethics | 4 credits | PHIL 210: ENGL 103 or ENGL 103W |
| SPEE 104 Intro to Human <br> Communication | 3 credits | PHIL 280: ENGL 115 or test score (concurrent enrollment allowed) |
| HEED 163 Nutrition | 2 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SOCI 240 Minority Groups in America | 3 credits | CHEM 100 or BIOL 110 |
| PHED 103 Life Wellness | 2 credits | NNGL 103 or ENGL 103W |
| Elective (if MATH 101 not taken) | 2 credits | Nee Course Descriptions for Details |

## Associate in Arts in Music

## Program Outcomes

Upon completion of this degree, students will have experienced a comprehensive introduction to music theory and performance, providing an active space for enculturation in both academic and professional environments of the music industry. The program will foster habits of mind conducive to building a creative and active learning community. Additionally, it will promote curiosity, flexibility, and openness to new information systems and approaches to learning in the service of creating expansive and enhanced spaces for persistence, engagement, and shared responsibility for the success of the curriculum.

## Employment Opportunities or Additional Educational Options

This degree prepares students for transfer to four-year institutions to study music and related fields for the long-range goal of careers in secondary education and college teaching or personal careers in performance. Students should meet with their advisor frequently to address specific career goals.

## To Learn More About This Program

Contact Dave Carew (voice) at 269-782-1226 or dcarew@swmich.edu or Mark Hollandsworth (instrumental) at 269-782-1225 or mhollandsworth@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or | Freshman English 2 (or with <br> ENGL 103W | 3 to 4 <br> wredits |
| ENGL 104 | Freshman English 3 | 3 credits | | MATHEMATICS |
| :---: |
| Course ID |

## NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 215 | Human Development and <br> Learning | 3 credits |
| PSYC 101 | General Psychology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HUMA 204 | Introduction to Film | 3 credits |
| MUSI 101 | Music Theory 1 | 3 credits |

## Total Program Credits: 60.5

## Additional Notes About the A.A. in Music Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 128 Contemporary |  |  |
| Mathematics | 4 credits | MATH 101, MATH 102, or test score |
| MUSI 101 Music Theory 1 | 3 credits | None |
| MUSI 105 Aural Skills 1 | 1 credit | None. Concurrent enrollment in MUSI 101 required |
| Instrumental: MUSI 113 or MUSI 116 <br> Voice: MUSI 118 or MUSI 123 | 1 to 2 credits | See Course Description for Details |
| MUSI 141 Class Piano | 1 credit | None |
| MUSI 251 Applied Music 3 | 1 credit | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| GEOG 110 Physical Geography | 4 credits | None |
| MUSI 102 Music Theory 2 | 3 credits | MUSI 101 or permission of appropriate Dean |
| MUSI 106 Aural Skills 2 | 1 credit | MUSI 105 or permission of appropriate Dean; concurrent enrollment in |
| MUSI 102 required |  |  |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENST 112 Environmental Science | 4 credits | None |
| MUSI 201 Music Theory 3 | 3 credits | MUSI 102 |
| MUSI 203 Music History 1 | 3 credits | MUSI 102 |
| MUSI 205 Aural Skills 3 | 1 credit | MUSI 106; concurrent enrollment in MUSI 201 required |
| Instrumental: MUSI 213 or MUSI 216 <br> Voice: MUSI 218 or MUSI 223 | 1 to 2 credits | See Course Description for Details |
| MUSI 143 Applied Music 2: Piano | .5 credit | MUSI 142 |
| MUSI 252 Applied Music 4 | 1 credit | MUSI 251 |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 215 Human Development and |  |  |
| Learning | 3 credits | PSYC 101 |
| HUMA 204 Introduction to Film | 3 credits | ENGL 103 or ENGL 103W |
| MUSI 202 Music Theory 4 | 3 credits | MUSI 201 |
| MUSI 204 Music History 2 | 3 credits | MUSI 102 |
| MUSI 206 Aural Skills 4 | 1 credit | MUSI 205; concurrent enrollment in MUSI 202 required |
| Instrumental: MUSI 213 or MUSI 216 <br> Voice: MUSI 218 or MUSI 223 | 1 to 2 credits | See Course Description for Details |
| MUSI 143 Applied Music 2: Piano | .5 credit | MUSI 142 |
| MUSI 252 Applied Music 4 | 1 credit | MUSI 251 |

## Associate in Arts in Paralegal

## Program Outcomes

Upon completion of this degree, students will have experienced a well-rounded general education, including a concentration in paralegal coursework that will prepare them well for advanced studies.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare for transfer to four-year institutions to continue their studies in paralegal or law disciplines.

## To Learn More About This Program

Contact Leon Letter at 269-782-1215 or lletter@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 110 | Human Biology | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| POSC 201 | American Government | 3 credits |
| ECON 202 | Microeconomics | 3 credits |

## HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 265 | Creative Nonfiction Writing | 3 credits |
| PHIL 210 | Introduction to Ethics | 4 credits |

## Additional Notes About the A.A. in Paralegal Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110 Introduction to Computer <br> Technology | 3 credits | None |
| LEGA 102 Law in the United States | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| LEGA 203 Legal Research \& Writing 1 | 3 credits | LEGA 102 (concurrent enrollment allowed); <br> SPEE 102 Fundamentals of Public <br> Speaking |
| ENGL 103 or ENGL 103W (concurrent enrollment allowed) |  |  |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BIOL 110 Human Biology | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| LEGA 204 Legal Research \& Writing 2 | 3 credits | LEGA 203 |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| ENGL 265 Creative Nonfiction Writing <br> or PHIL 210 Introduction to Ethics | 3 to 4 credits | ENGL 265: None |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 207 Business Law 1 | 3 credits | None. BUSI 200 recommended |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |
| GEOG 110 Physical Geography | 4 credits | None |
| LEGA 220 Torts | 3 credits | LEGA 102; LEGA 203 |
| POSC 201 American Government | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 208 Business Law 2 | 3 credits | None. BUSI 200 and BUSI 207 recommended |
| ENGL 265 Creative Nonfiction Writing <br> or PHIL 210 Introduction to Ethics | 3 to 4 credits | ENGL 265: None |
| LEGA 206 Civil Litigation | 3 credits | PHIL 210: ENGL 103 or ENGL 103W |

## Associate in Arts in Psychology

## Program Outcomes

Upon completion of this degree, students will have experienced a broad introduction to the field of psychology. In coordination with the general education components, students will be able to communicate effectively in a variety of situations in the field, demonstrate knowledge of and apply psychological concepts and theories to real world situations, and gather and analyze data within their own research.

## Employment Opportunities or Additional Educational Options

This degree prepares students to transfer to a four-year institution to work in the field while attaining a higher-level degree. The American Psychological Association provides the following as career options: drug counseling assistant, social service clerk, elderly home recreation aide, paraprofessional counselor, patient admissions record keeper. Students should meet with their advisor frequently to meet their specific needs.

## To Learn More About This Program

Contact Christi Young at 269-783-2106 or cyoung@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 110 | Human Biology | 4 credits |
| ENST 112 | Environmental Science | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

## HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| PHIL 210 | Introduction to Ethics | 4 credits |

## Additional Notes About the A.A. in Psychology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Students interested in transferring to Western Michigan University to complete a bachelor's degree should ensure that they complete PSYC 205, PSYC 260, and PSYC 101 as these are core Psychology courses in WMU's program.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Course | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |

SECOND SEMESTER

| Course | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 110 Human Biology | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| PHED 103 Life Wellness | 2 credits | None |
| Program Elective | 3 credits | See Course Description for Details |
| Program Elective | 3 credits | See Course Description for Details |

THIRD SEMESTER

| Course | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENST 112 Environmental Science | 4 credits | None |
| PSYC 260 Abnormal Psychology | 3 credits | PSYC 101 |
| Program Elective | 3 credits | See Course Description for Details |
| Program Elective | 3 credits | See Course Description for Details |

FOURTH SEMESTER

| Course | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHIL 210 Introduction to Ethics | 4 credits | ENGL 103 or ENGL 103W |
| PSYC 180 Social Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Program Elective | 3 credits | See Course Description for Details |
| Program Elective | 3 credits | See Course Description for Details |
| Program Elective | 3 credits | See Course Description for Details |

## Associate in Arts in Social Science

## Program Outcomes

Upon completion of this degree, students will have experienced a broad introduction to the social sciences. In coordination with the general education components, students will be able to communicate effectively in a variety of situations in the field, demonstrate knowledge of and apply concepts and theories to real world situations, and gather and analyze data within their own research.

## Employment Opportunities or Additional Educational Options

This degree prepares students to transfer to four-year institutions to study history, political science and related fields for the longrange goal of careers in secondary and college teaching, law, and social and political research. Students should meet with their advisor frequently to meet their specific needs.

## To Learn More About This Program

Contact Christi Young at 269-783-2106 or cyoung@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID Course Credits <br> ENGL 103 or <br> ENGL 103W Freshman English 2 (or with <br> workshop) 3 to 4 <br> credits <br> ENGL 104 Freshman English 3 3 creditsMATHEMATICs <br> Course ID$\quad$Course |
| :--- |
| MATH 150 |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BISC 111 | Biological Science | 4 credits |
| ENST 112 | Environmental Science | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| PHIL 201 | Intro to World Religion | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| PHED 103 | Life Wellness | 2 credits |
| SPEE 102 or <br> SPEE 104 | Fundamentals of Public <br> Speaking or Intro to Human <br> Communication | 3 credits |

Complete 24 credits from the list below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ECON 201 | Macroeconomics | 3 credits |
| ECON 202 | Microeconomics | 3 credits |
| HIST 101 | Western Civilization 1 | 4 credits |
| HIST 102 | Western Civilization 2 | 4 credits |
| HIST 201 | United States History 1 | 3 credits |
| HIST 202 | United States History 2 | 3 credits |
| HIST 290 | Special Topics in History | 3 credits |
| HUMA 210 | Intro to Non-Western <br> Civilization | 4 credits |
| PHIL 101 | Intro to Philosophical <br> Thought | 3 credits |
| POSC 201 | American Government | 3 credits |
| SOCI 203 | Marriage and Family | 3 credits |
| SOCI 240 | Minority Groups in America | 3 credits |
| SOWK 100 | Introduction to Social Work | 3 credits |

## Additional Notes About the A.A. in Social Science Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Students should consult with their advisor to ensure that they are making the right choices with program electives that will lead to their desired academic goal.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Program Elective | 3 credits | See Course Description for Details |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BISC 111 Biological Science | 4 credits | None |
| Program Elective | 3 credits | See Course Description for Details |
| Program Elective | 3 credits | See Course Description for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENST 112 Environmental Science | 4 credits | None |
| PHED 103 Life Wellness | 2 credits | None |
| Program Elective | 3 credits | See Course Description for Details |
| Program Elective | 3 credits | See Course Description for Details |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SPEE 102 Fundamentals of Public <br> Speaking or SPEE 104 Intro to <br> Human Communication | 3 credits | SPEE 104: ENGL 115 or test score (concurrent enrollment allowed) |

## Associate in Arts in Visual Arts

## Program Outcomes

Upon completion of this degree, students will have experienced a comprehensive introduction to contemporary studio art practices, providing learners scaffolding for actively contributing to/within all arts-related fields. The open sequence of coursework allows for personal exploration and individualized depth of inquiry. The program will foster habits of mind conducive to building a creative and active learning community. Additionally, it will promote curiosity, flexibility, and openness to new information systems and approaches to learning in the service of creating expansive and enhanced spaces for persistence, engagement, and shared responsibility for the success of the curriculum.

## Employment Opportunities or Additional Educational Options

This degree prepares students for transfer to four-year institutions or art schools to study in the visual art field. Students should meet with their advisor frequently to meet their specific needs.

## To Learn More About This Program

Contact Marc Dombrosky at 269-782-1382 or mdombrosky@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 33 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 104 | Intro to Human <br> Communication | 3 credits |

## MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 128 | Contemporary Mathematics | 4 credits |

## NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |
| GEOG 110 | Physical Geography | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 203 | Art History 1 | 3 credits |
| HUMA 204 | Introduction to Film | 3 credits |

Total Program Credits: 56
(Need 60 credits to graduate)

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration <br> and Planning | 1 credit |
| ART 100 | Introduction to Digital Art <br> and Design | 3 credits |
| ART 101 | Two Dimensional Design | 3 credits |
| ART 102 | Drawing 1 | 4 credits |
| ART 120 | Three Dimensional Design | 3 credits |
| ART 204 | Art History 2 | 3 credits |

Complete at least 9 credits from the list below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 103 | Ceramics 1 | 3 credits |
| ART 104 | Ceramics 2 | 3 credits |
| ART 105 | Photographic Design | 3 credits |
| ART 106 | Art Photography | 3 credits |
| ART 210 | Drawing 2 | 4 credits |
| ART 211 | Painting 1 | 4 credits |
| ART 212 | Painting 2 | 4 credits |
| ART 215 | Watercolor | 3 credits |
| ART 225 | Digital Photography | 3 credits |
| ART 299 | Directed Study | 1 to 4 credits |

## Additional Notes About the A.A. in Visual Arts Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Students may need to take additional courses to reach 60 total credits.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENST 112 Environmental Science | 4 credits | None |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 104 Intro to Human Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ART 100 Introduction to Digital Art and Design | 3 credits | Basic computer literacy |
| ART 120 Three Dimensional Design | 3 credits | None |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| GEOG 110 Physical Geography | 4 credits | None |
| HUMA 204 Introduction to Film | 3 credits | ENGL 103 or ENGL 103W |
| ART 203 Art History 1 | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Studio Elective | 3 credits | See Course Description for Details |
| Studio Elective | 3 to 4 credits | See Course Description for Details |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ART 204 Art History 2 | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Studio Elective | 3 credits | See Course Description for Details |
| Studio Elective | 3 credits | See Course Description for Details |
| Studio Elective | 3 to 4 credits | See Course Description for Details |

## Associate in Science Degree Programs

## To earn an A.S. degree in any A.S. program, students must:

- Complete the General Education Guidelines for Associate in Science Degree Programs (p.34).
- Earn a grade of "C" or better in each course approved for the "General Education and MTA Courses" section on the program page.
- Earn a grade of "C" or better in each internship or capstone course (if applicable to the program requirements).
- Earn a grade of "C" or better in each prerequisite course in the program. Review the Course Descriptions (pp.147-207) to understand prerequisite requirements.
- Earn a minimum of 18 major-specific credits to achieve the major credential (see Major-specific Required Courses section of each program curriculum in the pages to follow). Some majors require more than 18 credits to earn the credential. Students who fail to satisfy all major-specific requirements but who achieve all other degree requirements can be awarded the A.S. General Studies degree.
- Earn a minimum of 60 credits with a minimum cumulative GPA of 2.0.
- Submit a graduation application, preferably the semester before finishing all degree requirements.
- Adhere to the rest of the guidelines provided in the Graduation requirements section for A.S. Degrees (p.29).


## Associate in Science in Biology and Medical Pre-Professional

## Program Outcomes

This degree prepares students to transfer to a four-year institution to study upper-division science courses in a medical preprofessional program, with the ultimate goal of successful completion of an entrance exam and/or admissions requirements to a medical professional program.

## Employment Opportunities or Additional Educational Options

With this degree, students are prepared well to transfer to a four-year institution to study pre-med, chemistry, biology, health services, physics, or other related health or science fields.

## To Learn More About This Program

Contact Anna Norris at 269-782-1254 or anorris@swmich.edu or contact Tom Beaven at 269-782-1253 or tbeaven@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 34 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 130 | Precalculus Mathematics | 5 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 101 | General Biology 1 | 5 credits |
| BIOL 102 | General Biology 2 | 5 credits |
| CHEM 101 | General Chemistry 1 | 5 credits |
| CHEM 102 | General Chemistry 2 | 5 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| PHIL 201 | Introduction to World <br> Religion | 3 credits |

## Additional Notes About the A.S. in Biology and Medical Pre-Professional Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence section.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |$|$| BIOL 101 General Biology 1 | 5 credits | CHEM 100, or one year of high school chemistry with minimum grade of <br> B taken within the last 5 years, or test score; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |
| :---: | :---: | :---: |
| CHEM 101 General Chemistry 1 | 5 credits | MATH 127 or test score (concurrent enrollment allowed); CHEM 100, or <br> one year of high school chemistry with minimum grade of B taken within <br> the last 5 years, or test score; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |
| MATH 130 Precalculus Mathematics | 5 credits | MATH 127 or test score |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 102 General Biology 2 | 5 credits | BIOL 101 |
| CHEM 102 General Chemistry 2 | 5 credits | CHEM 101 and MATH 127 or test score |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CHEM 201 Organic Chemistry 1 | 5 credits | CHEM 102 |
| PHYS 101 Introductory Physics 1 | 5 credits | MATH 130 or test score |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHIL 201 Introduction to World |  |  |
| Religion |  |  |$\quad 3$ credits $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## Associate in Science in Environmental Sciences

## Program Outcomes

Upon completion of this degree, students will be able to understand the fundamental concepts of earth, environmental, chemical, and biological sciences and will be prepared to transfer to a four-year institution to study upper-level courses in relevant sciences.

## Employment Opportunities or Additional Educational Options

This degree prepares students for transfer to four-year institutions for further study in agriculture, biology, conservation/forestry, and environmental sciences. Please talk to your advisor frequently to ensure you select options that are right for your future.

## To Learn More About This Program

Contact Deirdre Kurtis at 269-782-1258 or dkurtis@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 34 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

COMMUNICATIONS

$\left\lvert\,$| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits | | MATHEMATICs |
| :---: |$\quad$| Credits |
| :---: |
| Course ID |$\quad\right.$ Course

## NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 101 | General Biology 1 | 5 credits |
| BIOL 102 | General Biology 2 | 5 credits |
| CHEM 101 | General Chemistry 1 | 5 credits |
| CHEM 102 | General Chemistry 2 | 5 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| PHIL 201 | Introduction to World <br> Religion | 3 credits |

## Additional Notes About the A.S. in Environmental Sciences Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence section.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CHEM 102 General Chemistry 2 | 5 credits | CHEM 101; MATH 127 or test score |
| GEOG 110 Physical Geography | 4 credits | None |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CHEM 201 Organic Chemistry 1 | 5 credits | CHEM 102 |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 101 General Biology 1 | 5 credits | CHEM 100, or one year of high school chemistry with minimum grade of <br> B taken within the last 5 years, or test score; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHIL 201 Introduction to World |  |  |
| Religion |  |  |$\quad 3$ credits $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## Associate in Science in General Studies

## Program Outcomes

Upon completion of this degree, students will have gained further understanding of valuing cultural and global diversity, being able to work effectively as part of a team, and thinking critically to solve problems.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to a four-year institution to continue their pursuit of a bachelor's degree in a variety of fields. Please contact your advisor frequently to utilize your course selection options wisely.

## To Learn More About This Program

Contact the Office of First Year Experience at 269-782-1499 or fye@swmich.edu or the Academic Advising and Resource Center at 269-782-1303 or askanadvisor@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 34 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or | Freshman English 2 (or with <br> ENGL 103W | 3 to 4 <br> credits |
| ENGL 104 or | Freshman English 3 or <br> Fundamentals of Public <br> SPEE 102 or <br> SPEE 104 | Fundice <br> Speaking or Intro to Human <br> Communication |

## MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 130 or <br> higher level | Precalculus Mathematics | 5 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 101 | General Biology 1 | 5 credits |
| BIOL 102 | General Biology 2 | 5 credits |
| CHEM 101 | General Chemistry 1 | 5 credits |
| SMC or Other <br> College | Other Approved Math <br> and/or Natural Science <br> Courses (see p.31) | 5 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| HUMA 210 | Intro to Non-Western <br> Civilization | 4 credits |

## Additional Notes About the A.S. in General Studies Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- The program shown on the previous page does not provide a student with all 60 credits needed to earn a degree. Students will need to take additional courses to reach 60 total credits.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 <br> Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 130 Precalculus Mathematics | 5 credits | MATH 127 or test score |
| BIOL 101 General Biology 1 | 5 credits | CHEM 100, or one year of high school chemistry with minimum grade of <br> B taken within the last 5 years, or test score; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 104 Freshman English 3 or <br> SPEE 102 Fundamentals of Public <br> Speaking or SPEE 104 Intro to <br> Human Communication | 3 credits | ENGL 104: ENGL 103 or ENGL 103W |
| SPEE 102: None |  |  |
| BIOL 102 General Biology 2 | 5 credits | SPEE 104: ENGL 115 or test score |
| Elective | 3 credits | BIOL 101 |
| Elective | 3 credits | See Course Descriptions for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Elective or Other approved Math <br> and/or Natural Science Courses | 3 to 5 credits | See Course Descriptions for Details |
| CHEM 101 General Chemistry 1 | 5 credits | MATH 127 or test score (concurrent enrollment allowed); CHEM 100, or <br> one year of high school chemistry with minimum grade of B taken within <br> the last 5 years, or test score; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |
| Elective | 3 credits | See Course Descriptions for Details |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| HUMA 210 Intro to Non-Western | 4 credits | ENGL 103 or ENGL 103W |
| Civilization |  |  |

## Associate in Science in Science, Engineering and Math Professional

## Program Outcomes

Upon completion of this degree, students will be able to think critically, understand fundamental concepts in math and science, and display sound problem-solving techniques.

## Employment Opportunities or Additional Educational Options

This degree prepares students for transfer to four-year institutions for further study in math and engineering. Please talk to your advisor frequently to ensure you select options that are right for your future.

## To Learn More About This Program

Contact Andrew Dohm at 269-782-1255 or adohm@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 34 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 104 | Intro to Human <br> Communication | 3 credits | | MATHEMATICS |
| :---: |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| CHEM 101 | General Chemistry 1 | 5 credits |
| CHEM 102 | General Chemistry 2 | 5 credits |
| MATH 141 | Analytical Geometry and <br> Calculus 1 | 5 credits |
| PHYS 201 | General Physics 1 | 5 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| POSC 201 | American Government | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

## HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 110 | Art Appreciation | 3 credits |
| PHIL 201 | Introduction to World <br> Religion | 3 credits |

## Additional Notes About the A.S. in Science, Engineering and Math Professional Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence section.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CHEM 101 General Chemistry 1 | 5 credits | MATH 127 or test score (concurrent enrollment allowed); CHEM 100, or <br> one year of high school chemistry with minimum grade of B taken within <br> the last 5 years, or test score; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |
| MATH 130 Precalculus Mathematics | 5 credits | MATH 127 or test score |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| POSC 201 American Government | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 104 Introduction to Human <br> Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CHEM 102 General Chemistry 2 | 5 credits | CHEM 101 and MATH 127 or test score |
| MATH 141 Analytical Geometry and <br> Calculus 1 | 5 credits | MATH 130 or test score |

SUMMER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MATH 142 Analytical Geometry and |  |  |
| Calculus 2 | 5 credits | MATH 141 |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 110 Art Appreciation | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 205 Differential Equations and Linear Algebra | 4 credits | MATH 142 |
| PHYS 201 General Physics 1 | 5 credits | MATH 141 |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHIL 201 Introduction to World |  |  |
| Religion |  |  |$\quad 3$ credits $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## Associate in Applied Science Degree Programs

## To earn an A.A.S. degree in any A.A.S. program, students must:

- Earn a grade of " C " or better in each course listed in the "General Education Courses" section or the "Prerequisite Courses" section on the program page.
- Earn a grade of "C" or better in each prerequisite course in the program. Review the Course Descriptions (pp.147-207) to understand prerequisite requirements.
- Earn a grade of "C" or better in each internship or capstone course (if applicable to the program requirements).
- Earn a minimum of 24 major-specific credits to achieve the major credential (see Major-specific Required Courses section of each program curriculum in the pages to follow).
- Earn a minimum of 60 credits with a minimum cumulative GPA of 2.0.
- Submit a graduation application, preferably the semester before finishing all degree requirements.
- Adhere to the rest of the guidelines provided in the Graduation requirements section for A.A.S. Degrees (p.29).


## Associate in Applied Science in Accounting

## Program Outcomes

Upon completion of this degree, students will have enhanced knowledge and gained experience in foundational accounting and business practices such as financial statement analysis, valuation of current assets, depreciation techniques, general ledger and more.

## Employment Opportunities or Additional Educational Options

This degree combined with relevant experience can prepare students for employment as a bookkeeper or to transition from SMC to Ferris State University (or other schools) to complete a four-year accounting degree. If you wish to transfer to another four-year program, please contact your advisor to determine specific course requirements at the receiving institution prior to selecting options/electives.

## To Learn More About This Program

Contact Clifford "Chip" Weeks at 269-782-1216 or cweeks@swmich.edu or Sue Pifer at 269-782-1227 or spifer@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ECON 202 | Microeconomics | 3 credits |
| ECON 201 | Macroeconomics | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ACCO 201 | Principles of Accounting 1 | 4 credits |
| ACCO 202 | Principles of Accounting 2 | 4 credits |
| ACCO 204 | Microcomputer Accounting <br> Applications | 3 credits |
| ACCO 211 | Intermediate Accounting 1 | 4 credits |
| ACCO 212 | Intermediate Accounting 2 | 4 credits |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 201 | Principles of Management | 3 credits |
| BUSI 207 | Business Law 1 | 3 credits |
| BUSI 214 | Business Communications | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 110 | Introduction to Computer <br> Technology | 3 credits |
| ISYS 181 | Spreadsheets | 3 credits |

Complete 3 credits from the list below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ACCO 203 | Federal Income Tax | 3 credits |
| ACCO 214 | Cost Accounting | 3 credits |
| ACCO 255 | Internship | 3 credits |
| BUSI 225 | Human Resource <br> Management | 3 credits |

## Additional Notes About the A.A.S. in Accounting Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. Students interested in the MTA would need one additional social science course, two different natural science courses (one with a lab), and two different humanities courses. Please see an advisor for proper selection of MTA-related courses to ensure proper fulfillment if the MTA is important to you.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ACCO 201 Principles of Accounting 1 | 4 credits | BUSI 200 (concurrent enrollment allowed) |
| BUSI 200 Small Business <br> Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110 Intro to Computer <br> Technology | 3 credits | None |
| SPEE 102 Fundamentals of Public <br> Speaking | 3 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or 103W |
| ACCO 202 Principles of Accounting 2 | 4 credits | ACCO 201 |
| BUSI 201 Principles of Management | 3 credits | BUSI 200 |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ACCO $204 \begin{gathered}\text { Microcomputer Accounting } \\ \text { Applications }\end{gathered}$ Applications | 3 credits | ACCO 201 and ISYS 110 |
| ACCO 211 Intermediate Accounting 1 | 4 credits | ACCO 202 |
| BUSI 214 Business Communications | 3 credits | BUSI 200; ENGL 103 or ENGL 103W |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |
| ISYS 181 Spreadsheets | 3 credits | ISYS 110 |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ACCO 212 Intermediate Accounting 2 | 4 credits | ACCO 211 |
| BUSI 207 Business Law 1 | 3 credits | None. BUSI 200 recommended |
| ECON 201 Macroeconomics | 3 credits | MATH 101, MATH 102, or test score |
| ACCO or BUSI Elective Choice | 3 credits | See Course Descriptions for Details |

## Associate in Applied Science in Agricultural Business

## Program Outcomes

Upon completion of this degree, students will earn either a Certificate in Agricultural Operations or a Certificate in Fruit and Vegetable Crop Management from Michigan State University in addition to the A.A.S. degree from Southwestern Michigan College. Students are also encouraged to consider transferring to Ferris State University after completion of the A.A.S. to earn a B.S. in Business Administration. All programs can be completed on the Southwestern Michigan College campus.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to a four-year institution like Ferris State University to work on a bachelor's degree or seek employment in the support or production industries.

## To Learn More About This Program

Contact MSU Program Coordinator Stacey Rocklin at 269-782-1291 or srocklin@swmich.edu or the Office of First Year Experience at 269-782-1499 or fye@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with workshop) | 3 to 4 credits |
| ENGL 104 or SPEE 102 | Freshman English 3 or Fundamentals of Public Speaking | 3 credits |

## MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 118 or <br> CHEM 100 | Plant Biology or <br> Fundamentals of Chemistry | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ECON 202 | Microeconomics | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BUSI 200 | Small Business <br> Management | 3 credits |
| ISYS 110 | Introduction to Computer <br> Technology | 3 credits |

Complete 6 to $\mathbf{7}$ credits from the list below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ACCO 201 | Principles of Accounting 1 | 4 credits |
| BUSI 201 | Principles of Management | 3 credits |
| BUSI 207 | Business Law 1 | 3 credits |
| BUSI 212 | Supervision | 3 credits |
| BUSI 220 | Marketing | 3 credits |

Complete MSU Certificate

| Course ID | Course |  |
| :---: | :---: | :---: | | Credits |
| :---: |
| MSU | Completed MSU Certificate $\quad$| 30 or 34 |
| :---: |
| credits |

## Additional Notes About the A.A.S. in Agricultural Business Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. Students would need another natural science and social science course and two humanities courses. Students should see their advisor to ensure proper selection.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 110 Introduction to Computer | 3 credits | None |
| Technology |  |  |

SUMMER SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MSU Internship | 3 credits | See Program Coordinator for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MSU Certificate Courses | 8 credits | See Program Coordinator for Details |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |
| ACCO or BUSI Elective | 3 to 4 credits | See Course Description for Details |
| ENGL 104 Freshman English 3 or <br> SPEE 102 Fundamentals of Public <br> Speaking | 3 credits | ENGL 104: ENGL 103 or 103W <br> SPEE 102: None |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 200 Small Business |  |  |
| Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MSU Certificate Courses | 6 credits | See Program Coordinator for Details |
| ACCO or BUSI Elective | 3 to 4 credits | See Course Description for Details |

## Associate in Applied Science in Agricultural Technology

## Program Outcomes

Upon completion of this degree, students will earn either a Certificate in Agricultural Operations or a Certificate in Fruit and Vegetable Crop Management from Michigan State University in addition to the A.A.S. degree from Southwestern Michigan College.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to a four-year institution to work on a bachelor's degree or seek employment in the support or production industries.

## To Learn More About This Program

Contact MSU Program Coordinator Stacey Rocklin at 269-782-1291 or srocklin@swmich.edu or the Office of First Year Experience at 269-782-1499 or fye@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 or <br> SPEE 104 | Freshman English 3 or <br> Introduction to Human <br> Communication | 3 credits |

## MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 127 | College Algebra | 4 credits |

## NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 118 | Plant Biology | 4 credits |
| CHEM 100 or <br> CHEM 101 | Fundamentals of Chemistry <br> or General Chemistry 1 | 4 to 5 <br> credits |

SOCIAL SCIENCE

| Course ID |  | Course |
| :---: | :---: | :---: |
| ECON 201 or <br> ECON 202 | Macroeconomics or <br> Microeconomics | 3 credits |
| POSC 201 | American Government | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HIST 101 or <br> Other approved <br> Humanities <br> course | Western Civilization 1 | 3 to 4 <br> credits |

## Additional Notes About the A.A.S. in Agricultural Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. Students would need another humanities course and should see their advisor to ensure proper selection.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| CHEM 100 Fundamentals of <br> Chemistry or CHEM 101 General <br> Chemistry 1 | 4 to 5 credits | CHEM 100: MATH 101, MATH 102, or test score (concurrent enrollment <br> allowed); ENGL 115 or test score (concurrent enrollment allowed) <br> CHEM 101: MATH 127 or test score (concurrent enrollment allowed); <br> CHEM 100, or one year of high school chemistry with minimum grade of <br> B taken within the last 5 years, or test score; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |
| BUSI 200 Small Business <br> Management or ISYS 110 <br> Introduction to Computer Technology | 3 credits | BUSI 200: ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110: None |  |  |

SUMMER SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MSU Internship | 3 credits | See Program Coordinator for Details |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $C^{\prime \prime}$ Required) |
| :---: | :---: | :---: |
| MATH 127 College Algebra | 4 credits | MATH 101 or test score |
| ECON 201 Macroeconomics or ECON | 3 credits | MATH 101, MATH 102, or test score |
| 202 Microeconomics | 8 credits | See Program Coordinator for Details |
| MSU Certificate Courses |  |  |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or 103W |
| POSC 201 American Government | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| HIST 101 Western Civilization 1 or <br> Other Humanities Course | 3 to 4 credits | HIST 101: ENGL 115 or test score (concurrent enrollment allowed) |
| MSU Certificate Courses | 6 credits | See Program Coordinator for Details |

## Associate in Applied Science in Automotive Technology

## Program Outcomes

Upon completion of this degree, students will have experience in diagnosing and fixing many common automotive problems. This program is certified by the National Institute for Automotive Excellence for ASE Master Technician.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to seek employment as automotive service technicians in various settings, such as automobile dealerships, independent service facilities, franchised repair facilities, and specialty shops.

## To Learn More About This Program

Contact Jeff Robson at 269-783-2967 or jrobson01@swmich.edu or Kyle Schrock at 269-783-2123 or kschrock@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 102 or <br> SPEE 104 | Fundamentals of Public <br> Speaking or Intro to Human <br> Communication | 3 credits |

## MATHEMATICS

| Course ID |  | Course |
| :---: | :---: | :---: | Credits

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and Planning | 1 credit |
| AUTO 103 | Intro to Automotive Technology | 3 credits |
| AUTO 116 | Brake Systems | 3 credits |
| AUTO 119 | Electrical 1 | 3 credits |
| AUTO 122 | Steering Suspension Systems | 3 credits |
| AUTO 131 | Manual Transmissions | 3 credits |
| AUTO 147 | Engine Repair 1 | 3 credits |
| AUTO 148 | Engine Repair 2 | 3 credits |
| AUTO 216 | Heating and Air Conditioning | 3 credits |
| AUTO 222 | Electrical 2 | 3 credits |
| AUTO 223 | Electrical 3 | 3 credits |
| AUTO 227 | Engine Performance 1 | 3 credits |
| AUTO 228 | Engine Performance 2 | 3 credits |
| AUTO 229 | Engine Performance 3 | 3 credits |
| AUTO 232 | Advanced Brakes \& Chassis Systems | 3 credits |
| AUTO 234 | Automatic Transmissions | 3 credits |
| AUTO 246 | Alternative Fuel and Hybrid Electric Vehicles | 3 credits |
| AUTO 255 | Internship | 5 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |

## Additional Notes About the A.A.S. in Automotive Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. Students interested in meeting MTA requirements would need a higher-level math course, two different natural science courses (one with a lab), two different social science courses, and two different humanities courses. If interested in the MTA, students should seek help from an advisor for course selection.
- Students who have completed the A.A.S. Automotive Technology program have also met the requirements for the Certificate in Automotive Technology.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| AUTO 103 Intro to Automotive Tech | 3 credits | None |
| AUTO 119 Electrical 1 | 3 credits | None |
| AUTO 116 Brake Systems | 3 credits | None |
| AUTO 122 Steering and Suspension |  |  |
| Systems |  |  | 3 credits $\quad$ None |  |
| :--- |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| AUTO 216 Heating and Air Conditioning | 3 credits | AUTO 103 |
| AUTO 147 Engine Repair 1 | 3 credits | AUTO 103 |
| AUTO 222 Electrical 2 | 3 credits | AUTO 103 and AUTO 119 |
| MATH 101 Introductory Algebra or MATH 102 Mathematical Literacy | 4 credits | MATH 098 or test score |
| AUTO 227 Engine Performance 1 | 3 credits | AUTO 103 and AUTO 119 |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| AUTO 228 Engine Performance 2 | 3 credits | AUTO 227 |
| AUTO 148 Engine Repair 2 | 3 credits | AUTO 147 |
| AUTO 131 Manual Transmissions | 3 credits | AUTO 103 |
| AUTO 232 Advanced Brakes and Chassis Systems | 3 credits | AUTO 103; AUTO 116; AUTO 119; AUTO 122 |
| SPEE 102 Fund of Public Speaking or SPEE 104 Intro to Human Comm | 3 credits | SPEE 102: None <br> SPEE 104: ENGL 115 or test score (concurrent enrollment allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| AUTO 229 Engine Performance 3 | 3 credits | AUTO 228 |
| AUTO 246 Alternative Fuels and <br> Hybrid Electric Vehicles | 3 credits | AUTO 222 |
| AUTO 234 Automatic Transmissions | 3 credits | AUTO 103 |
| AUTO 223 Electrical 3 | 3 credits | AUTO 222 |
| AUTO 255 Internship | 5 credits | Completion of Automotive Certificate program courses and <br> recommendation of program advisor |

## Associate in Applied Science in Business

## Program Outcomes

Upon completion of this degree, students will have a well-rounded degree that concentrates on foundational business theories and practices. Students will gain competence in basic accounting principles, have a knowledge of the management theories found in today's marketplace, and be familiar with the laws that govern business.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to four-year institutions to continue their studies in business or related fields or prepare to enter the workforce in a variety of business areas like sales and sales management. Employability depends upon the right experiences to match the educational achievement and social development of the individual.

## To Learn More About This Program

Contact Jane Mitchell at 269-782-1218 or jmitchell@swmich.edu or James Benak at 269-782-1221 or jbenak@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of " C " or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits | | MATHEMATICS |
| :--- | | Course ID |
| :---: |$\quad$ Course

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENST 112 | Environmental Science | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ECON 202 | Microeconomics | 3 credits |
| ECON 201 | Macroeconomics | 3 credits |

## HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HUMA 210 | Introduction to Non- <br> Western Civilization | 4 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ACCO 201 | Principles of Accounting 1 | 4 credits |
| ACCO 202 | Principles of Accounting 2 | 4 credits |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 201 | Principles of Management | 3 credits |
| BUSI 207 | Business Law 1 | 3 credits |
| BUSI 210 | Personal Finance | 3 credits |
| BUSI 214 | Business Communications | 3 credits |
| BUSI 220 | Marketing | 3 credits |
| BUSI 225 | Human Resource <br> Management | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 110 | Introduction to Computer <br> Technology | 3 credits |

Complete 1 course from the list below

| Course ID |  | Course |
| :---: | :---: | :---: |
| BUSI 208 | Business Law 2 | 3 credits |
| BUSI 212 | Supervision | 3 credits |
| BUSI 221 | Advertising | 3 credits |
| BUSI 255 | Internship | 3 credits |
| ISYS 181 | Spreadsheets | 3 credits |

## Additional Notes About the A.A.S. in Business Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. Students interested in MTA requirements would need to complete an additional natural science course, an additional social science course, and an additional humanities course (non-HUMA). Students should seek assistance from an advisor for proper course selection if MTA is important.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 <br> Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ACCO 201 Principles of Accounting 1 | 4 credits | BUSI 200 (concurrent enrollment allowed) |
| BUSI 200 Small Business <br> Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110 Intro to Computer <br> Technology | 3 credits | None |
| SPEE 102 Fundamentals of Public <br> Speaking | 3 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ACCO 202 Principles of Accounting 2 | 4 credits | ACCO 201 |
| BUSI 201 Principles of Management | 3 credits | BUSI 200 |
| BUSI 220 Marketing | 3 credits | BUSI 200 or permission of appropriate Dean; BUSI 214 recommended |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 207 Business Law 1 | 3 credits | None. BUSI 200 recommended |
| BUSI 210 Personal Finance | 3 credits | None |
| BUSI 214 Business Communications | 3 credits | BUSI 200; ENGL 103 or ENGL 103W |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |
| ENST 112 Environmental Science | 4 credits | None |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 225 Human Resource Management | 3 credits | BUSI 200 |
| BUSI 240 Professionalism Workshop | 1 credit | None. BUSI 200 recommended |
| ECON 201 Macroeconomics | 3 credits | MATH 101, MATH 102, or test score |
| HUMA 210 Intro to Non-Western Civilization | 4 credits | ENGL 103 or ENGL 103W |
| BUSI or ISYS Elective Choice | 3 credits | See Course Descriptions for Details |

## Associate in Applied Science in Construction Trades Green Technology

## Program Outcomes

Upon completion of this degree, students will have a solid foundation in "green" building in accordance with the National Association of Home Builders (NAHB) guidelines. Students will take a variety of courses to prepare them for nationally recognized certification exams. Students will develop the understanding and skills to build, inspect, repair, and weatherize structures utilizing trade specific tools and equipment.

## Employment Opportunities or Additional Educational Options

The Construction Trades Green Technology program prepares students to gain successful employment in the construction industry. Students who intend to transfer to another school for further education in this field should speak with an advisor.

## To Learn More About This Program

Contact Larry Wilson at 269-783-2966 or Iwilson05@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of " C " or better.

## General Education Courses

## COMMUNICATIONS

| $\left\lvert\,$Course ID Course Credits <br> ENGL 103 or <br> ENGL 103W Freshman English 2 (or with <br> workshop) 3 to 4 <br> credits <br> SPEE 102 Fundamentals of Public <br> Speaking 3 creditsMATHEMATICS$\quad$Course ID <br> MATH 102\right. Mathematical Literacy |
| :--- |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and Planning | 1 credit |
| BUSI 200 | Small Business Management | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| CADD 101 | Introduction to CAD/Auto CAD | 4 credits |
| CONS 114 | Intermediate Construction Practices | 8 credits |
| CONS 115 | Construction Math | 2 credits |
| CONS 117 | Print Reading for Construction Trades | 2 credits |
| CONS 130 | Interior and Exterior Finishes | 3 credits |
| CONS 135 | Electrical and Mechanical Systems | 3 credits |
| CONS 140 | Quality and Cost Estimating | 3 credits |
| CONS 145 | Administration and Scheduling | 3 credits |
| CONS 150 | Solar Energy Technology | 1 credit |
| CONS 161 | REScheck Building Energy Codes | 2 credits |
| CONS 165 | Building Analyst/Envelope | 4 credits |
| CONS 169 | Green Professional | 2 credits |
| CONS 180 | Design and Planning | 5 credits |
| CONS 255 | Internship | 3 credits |
| ISYS 110 | Introduction to Computer Technology | 3 credits |

## Additional Notes About the A.A.S. in Construction Trades Green Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. If you are interested in satisfying MTA requirements, you must take a higher-level mathematics course, two different natural science courses, two different social science courses, and two different humanities courses. Please see your advisor for specific MTA guidelines and proper course selection.
- Students who complete the A.A.S. in Construction Trades Green Technology program will have also met the requirements of the certificate program.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and |  |  |
| Planning |  |  | 1 credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " C " Required) |
| :---: | :---: | :---: |
| CONS 115 Construction Math | 2 credits | MATH 098 or test score |
| CONS 130 Interior and Exterior Finishes | 3 credits | None |
| CONS 135 Electrical and Mechanical Systems | 3 credits | None |
| CONS 140 Quantity and Cost Estimating | 3 credits | ISYS 110 |
| CONS 145 Administration and Scheduling | 3 credits | None |
| CONS 255 Internship | 3 credits | Minimum grade of " C " in all first semester Construction Trades Technology courses |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 <br> credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CADD 101 Introduction to CAD/Auto CAD | 4 credits | None |
| CONS 165 Building Analyst/Envelope | 4 credits | None |
| MATH 102 Mathematical Literacy | 4 credits | MATH 098 or test score |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SPEE 102 Fundamentals of Public | 3 credits | None |
| Speaking |  |  |

## Associate in Applied Science in Criminal Justice

## Program Outcomes

Upon completion of this degree, students will have experienced a broad introduction to the field of criminal justice. In coordination with the general education components, students will be able to communicate effectively in a variety of situations in the field, demonstrate knowledge and application of analytical skills to criminal justice situations, and apply criminological theories to contemporary public policy.

## Employment Opportunities or Additional Educational Options

This degree is for students who specifically want a two-year degree or plan on transferring to Ferris State University to complete a four-year degree in criminal justice. If you wish to transfer to another four-year program, please contact your advisor to determine specific course requirements at the receiving institution prior to selecting options/electives. Employment opportunities may include law enforcement, courts, and adult or juvenile corrections. Graduates may also find employment in insurance adjustment, dispatch, court hearings, public or private security, and license inspection with the Department of Motor Vehicles or as technicians in a number of other local, state, and federal criminal justice agencies. This degree can be used to enable persons who are already employed to move up to a mid-level position with their current employer. Students should meet with their advisor frequently to meet their specific needs.

## To Learn More About This Program

Contact Don Ricker at 269-782-1392 or dricker@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of " C " or better.

## General Education Courses

COMMUNICATIONS

| Course ID Course Credits <br> ENGL 103 or <br> ENGL 103W Freshman English 2 (or with <br> workshop) 3 to 4 <br> credits <br> ENGL 104 Freshman English 3 3 credits <br> SPEE 102 Fundamentals of Public <br> Speaking 3 creditsMATHEMATICS <br> Course ID <br> MATH 128 or <br> MATH 150Contemporary Mathematics <br> or Statistics$\quad$ Credits |
| :--- |

## NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 110 | Human Biology | 4 credits |
| ENST 112 | Environmental Science | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| POSC 201 | American Government | 3 credits |
| PSYC 101 | General Psychology | 3 credits |
| SOCI 201 | Principles of Sociology | 3 credits |

HUMANITIES

| Course ID |  | Course |
| :---: | :---: | :---: |
| HUMA 210 | Introduction to Non-Western <br> Civilization | 4 credits |
| SOCI 240 | Minority Groups in America | 3 credits |

## Major-specific Required Courses

| Course ID |  | Course |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BUSI 200 or <br> BUSI 207 | Small Business Management <br> or Business Law 1 | 3 credits |
| CRIM 110 | Intro to Criminal Justice | 3 credits |
| CRIM 111 | Intro to Corrections | 3 credits |
| CRIM 113 or <br> CRIM 102 | Intro to Law Enforcement or <br> Serial Killer | 3 credits |

Complete either the Criminal Justice Generalist Track or the Corrections, Probation, and Parole Track listed below.
GENERALIST TRACK

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| CRIM 112 | Intro to United States Legal <br> Systems | 3 credits |
| CRIM 220 | Supervision and Management <br> in Criminal Justice | 3 credits |
| CRIM 260 | Delinquency, Prevention, and <br> Control | 3 credits |
| ISYS 110 | Intro to Computer Technology | 3 credits |

CORRECTIONS, PROBATION, AND PAROLE TRACK

| Course ID |  | Course |
| :---: | :---: | :---: |
| CRIM 219 | Conflict Management in <br> Corrections | 3 credits |
| CRIM 235 | Legal Issues in Corrections | 3 credits |
| CRIM 270 | Correctional Institutions | 3 credits |
| CRIM 275 | Correctional Clients | 3 credits |

## Additional Notes About the A.A.S. in Criminal Justice Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- This program offers two tracks, the Generalist track and the Corrections, Probation, and Parole track. Students must choose one of these tracks and complete all courses within the track as a part of degree requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| BUSI 200 Small Business Management or BUSI 207 Business Law 1 | 3 credits | BUSI 200: ENGL 115 or test score (concurrent enrollment allowed) BUSI 207: None. BUSI 200 recommended |
| CRIM 110 Intro to Criminal Justice | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| CRIM 111 Intro to Corrections | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 110 Human Biology | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| POSC 201 American Government | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 240 Minority Groups in America | 3 credits | ENGL 103 or ENGL 103W |
| ENST 112 Environmental Science | 4 credits | None |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CRIM 112 Intro to US Legal Systems or <br> CRIM 219 Conflict Management in <br> Corrections | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CRIM 220 Supervision/Management in <br> Criminal Justice or CRIM 270 <br> Correctional Institutions | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| CRIM 113 Intro to Law Enforcement |  |  |
| or CRIM 102 Serial Killer |  |  |$\quad 3$ credits $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## Associate in Applied Science in Early Childhood Education

## Program Outcomes

Upon completion of this degree, students will have experienced a comprehensive exposure and experience in early childhood education, with a whole-child focus. In coordination with the general education components, students will have demonstrated professionalism, strong relational skills, and the understanding of the community collaboration in the classroom. They will also have shown the ability to identify opportunities for diversified teaching, including exceptional needs (interpersonal, emotional, psychological, intellectual functioning and language development) and demonstrated the understanding of unique family structures and needs.

## Employment Opportunities or Additional Educational Options

This degree prepares students to transfer to Ferris State University or other four year institutions, as well as work in the field, while attaining a higher-level degree. Some potential employment opportunities include Head Start preschool lead or associate teacher, program director in early childcare settings (see ECE program director) and Great Start Readiness Program (GSRP) Associate preschool teacher.

## To Learn More About This Program

Contact Ranee Conley at 269-783-2116 or rconley@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 127 | College Algebra | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BISC 111 | Biological Science | 4 credits |

## SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| HIST 230 | Michigan History | 3 credits |
| PSYC 296 | Educational Psychology | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| EDUC 101 | Introduction to Teaching | 1 credit |
| EDUC 115 | Introduction to Early <br> Childhood Education | 3 credits |
| EDUC 208 | Infant/Toddler Care | 3 credits |
| EDUC 210 | Diversity in Early Childhood | 3 credits |
| EDUC 217 | Early Childhood <br> Development | 3 credits |
| EDUC 220 | Guiding Children's Social <br> Development | 4 credits |
| EDUC 221 | Early Childhood <br> Curriculum/Cognitive and <br> Communication | 3 credits |
| EDUC 222 | Early Childhood <br> Curriculum/Physical and <br> Creative | 3 credits |
| EDUC 230 | Administration of Early <br> Childhood Programs | 3 credits |
| EDUC 240 | Early Childhood Education <br> Internship | 4 credits |
| EDUC 260 | Emergent Literacy | 3 credits |
| PHED 103 or <br> BUSI 240 | Life Wellness or <br> Professionalism Workshop | 1 to 2 |
| credits |  |  |

## Additional Notes About the A.A.S. in Early Childhood Education Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need one additional science course and two different humanities courses. See advisor for specific details if the MTA is important to you.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| BISC 111 Biological Science | 4 credits | None |
| EDUC 220 Guiding Children's Social Development | 4 credits | EDUC 115 |
| EDUC 222 Early Childhood Curriculum/Physical and Creative | 3 credits | EDUC 115 |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 208 Infant/Toddler Care | 3 credits | EDUC 115 |
| EDUC 221 Early Childhood <br> Curriculum/Cognitive and <br> Communication | 3 credits | EDUC 115 |
| EDUC 230 Administration of Early <br> Childhood Programs | 3 credits | EDUC 115 |
| EDUC 260 Emergent Literacy | 3 credits | EDUC 115 |
| HIST 230 Michigan History | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 210 Diversity in Early Childhood | 3 credits | EDUC 115 |
| EDUC 217 Early Childhood Development | 3 credits | EDUC 115 |
| EDUC 240 Early Childhood Education Internship | 4 credits | Permission of appropriate Dean |
| PSYC 296 Educational Psychology | 3 credits | PSYC 101 |
| PHED 103 Life Wellness or BUSI 240 Professionalism Workshop | 1 to 2 credits | None |

## Associate in Applied Science in Engineering Technology

## Program Outcomes

Upon completion of this degree, students will be able to apply established scientific and engineering knowledge to the solutions of industrial problems.

## Employment Opportunities or Additional Educational Options

With this degree, graduates typically seek work for major technological companies in areas which deal with application, manufacturing, implementation, engineering operating, sales and production. They are often the "implementers" of designs and plans. Engineering technicians usually work as part of a team with the craftsman and the engineer, working closest to the engineer in duties and responsibilities. Graduates with an associate degree often continue on to complete a bachelor's degree and become engineering technologists. This degree is designed to transfer into three different bachelor's degrees at Western Michigan University: Engineering Design Technology (EDT), Manufacturing Engineering Technology (MFT), or Engineering Management Technology (UEM).
*Note: If you are interested in Engineering (Mechanical, Electrical, Chemical, Civil, Environmental, etc.) please follow the Associate in Science in Science, Engineering and Math Professional degree program.

## To Learn More About This Program

Contact Andrew Dohm at 269-782-1255 or adohm@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 104 | Intro to Human <br> Communication | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 130 | Precalculus Mathematics | 5 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| CHEM 101 | General Chemistry 1 | 5 credits |
| PHYS 101 | Introductory Physics 1 | 5 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ECON 202 | Microeconomics | 3 credits |
| POSC 201 | American Government | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HUMA 210 | Introduction to Non- <br> Western Civilization | 4 credits |
| HIST 102 | Western Civilization 2 | 4 credits |

## Additional Notes About the A.A.S. in Engineering Technology

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence section.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110 Introduction to Computer Technology | 3 credits | None |
| MATH 130 Precalculus Mathematics | 5 credits | MATH 127 or test score |
| POSC 201 American Government | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MATH 141 Analytical Geometry Calculus 1 | 5 credits | MATH 130 or test score |
| CHEM 101 General Chemistry 1 | 5 credits | MATH 127 or test score (concurrent enrollment allowed); CHEM 100, or one year of high school chemistry with minimum grade of $B$ taken within the last 5 years, or test score; ENGL 115 or test score (concurrent enrollment in ENGL 115 allowed) |
| HUMA 210 Introduction to NonWestern Civilization | 4 credits | ENGL 103 or ENGL 103W |
| PHED 103 Life Wellness | 2 credits | None |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHYS 101 Introductory Physics 1 | 5 credits | MATH 130 or test score |
| INTE 126 Intro to Manufacturing |  |  |
| Systems |  |  |$\quad 3$ credits $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHYS 102 Introductory Physics 2 | 5 credits | PHYS 101 |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score. |
| HIST 102 Western Civilization 2 | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 104 Introduction to Human <br> Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## Associate in Applied Science in Fire Science

## Program Outcomes

Upon completion of this degree, students will have enhanced their firefighting techniques and developed a better understanding of building materials and fire prevention.

## Employment Opportunities or Additional Educational Options

This degree is designed to promote career advancement for the already-certified volunteer or career firefighter.

## To Learn More About This Program

Contact Niles Campus Student Services at 800-456-8675, ext 4811 or niles@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

## COMMUNICATIONS

| $\left\lvert\,$Course ID Course Credits <br> ENGL 103 or <br> ENGL 103W Freshman English 2 (or with <br> workshop) 3 to 4 <br> credits <br> ENGL 104 Freshman English 3 3 credits <br> SPEE 104 Intro to Human <br> Communication 3 creditsMATHEMATICS <br> Course ID <br> MATH 101\right. Introductory Algebra |
| :--- |

## NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| CHEM 100 | Fundamentals of Chemistry | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| POSC 201 | American Government | 3 credits |
| PSYC 101 or <br> SOCI 201 | General Psychology or <br> Principles of Sociology | 3 credits |

## Additional Notes About the A.A.S. in Fire Science Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence section.
- This program as outlined does not meet MTA requirements. Students who are interested in satisfying the MTA need to complete a higher-level mathematics course, another natural science course, and two different humanities courses. Please see your advisor for specific guidelines for the MTA to ensure proper course selection.
- The 12 credits of FISC 102 are only available to students who present a valid Firefighter 1 and 2 certificate from the Michigan Fire Fighters Training Council or the Indiana Public Safety Institute with Hazmat training.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| HEED 131 Emergency Medical Technician 1 | 5 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 101 Introductory Algebra | 4 credits | MATH 098 or test score |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| FISC 213 Intro to Fire Detection and Suppression | 3 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or 103W |
| CHEM 100 Fundamentals of |  |  |
| Chemistry |  |  |$\quad 4$ credits $\quad$| MATH 101, MATH 102, or test score (concurrent enrollment allowed); |
| :---: |
| ENGL 115 or test score (concurrent enrollment allowed) |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| FISC 210 Fire Cause Determination | 3 credits | None |
| PSYC 101 General Psychology or <br> SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| FISC 211 Instructional Techniques | 3 credits | None |
| SPEE 104 Intro to Human <br> Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110 Intro to Computer |  |  |
| Technology |  |  |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $\mathrm{C}^{\prime}$ " Required) |
| :---: | :---: | :---: |
| FISC 110 Fire Prevention | 3 credits | None |
| FISC 111 Building Construction | 3 credits | None |
| FISC 112 Service Tactics | 3 credits | None |
| POSC 201 American Government | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## Associate in Applied Science in Graphic Design Technology

## Program Outcomes

Upon completion of this degree, students will have experienced an orientation to contemporary systems of visual communication and client-driven design-based practices. This degree track prepares learners to move directly into a professional experience in their field upon graduation. The program fosters habits of mind conducive to building a creative and active learning community. It promotes curiosity, flexibility, and openness to new information systems and approaches to learning in the service of creating expansive and enhanced spaces for persistence, engagement, and shared responsibility for the success of the curriculum.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to four-year institutions to continue their studies in graphic design or a related field or prepare for work in art, design, illustration, or related fields.

## To Learn More About This Program

Contact Sam Walker at 269-783-2109 or swalker01@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 128 | Contemporary Mathematics | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ART 204 | Art History 2 | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ART 100 | Intro to Digital Art and <br> Design | 3 credits |
| ART 101 | Two Dimensional Design | 3 credits |
| ART 102 | Drawing 1 | 4 credits |
| ARTTo5 or ART <br> 225 | Photographic Design or <br> Digital Photography | 3 credits |
| ART 213 | Typography in Design | 3 credits |
| ART 219 | Graphic Design 1 | 3 credits |
| ART 220 | Graphic Design 2 | 3 credits |
| ART 230 | Digital Publishing | 3 credits |
| ART 255 | Art Internship | 2 credits |
| ART 261 | Prepress | 3 credits |
| ART 265 | Portfolio Production | 3 credits |
| BUSI 200 | Small Business <br> Management | 3 credits |
| ISYS 241 | Introduction to Web <br> Development | 3 credits |
| ART | Art Electives | 6 credits |

## Additional Notes About the A.A.S. in Graphic Design Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. Students would need two different natural science courses (one with a lab), one additional social science course (non-PSYC), and one additional humanities course (non-ART). Please see your advisor for specific MTA guidelines if meeting MTA requirements is important to you.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ART 100 Introduction to Digital Art and Design | 3 credits | Basic Computer Literacy |
| ART 101 Two Dimensional Design | 3 credits | None |
| ART 102 Drawing 1 | 4 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or 103W |
| ART 105 Photographic Design or ART |  |  |
| 225 Digital Photography |  |  | $3^{\text {ART 105: None }}$| ART 225: ART 100 |
| :---: |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $C^{\prime \prime}$ Required) |
| :---: | :---: | :---: |
| ART 261 Prepress | 3 credits | ART 213; concurrent enrollment in ART 219 required |
| ART 219 Graphic Design 1 | 3 credits | ART 213 |
| ART 230 Digital Publishing | 3 credits | ART 100 |
| BUSI 200 Small Business |  |  |
| Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Art Elective | 3 credits | See Course Descriptions for Details |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ART 220 Graphic Design 2 | 3 credits | ART 219 |
| ART 265 Portfolio Production | 3 credits | ART 219; concurrent enrollment in ART 220 required |
| ART 255 Internship | 2 credits | Completion of 3 semesters in the program or permission of appropriate <br> instructional Dean |
| ISYS 241 Intro to Web Development | 3 credits | None |
| Art Elective | 3 credits | See Course Descriptions for Details |

## Associate in Applied Science in Health Information Technology

## Program Outcomes

Upon completion of this degree, students will be proficient in the acquisition, analyzation and protection of digital and traditional medical information vital in providing quality patient care. This program encompasses business, science, and computer technology. Graduates are expected to have working knowledge in the following six domains: 1) data content, structure and standards, 2) information protection, 3 ) informatics, 4) revenue management, 5) compliance, and 6) leadership.

## Employment Opportunities or Additional Educational Options

With this degree, students can sit for the international exam to earn the credential of Registered Health Information Technician (RHIT). With this credential, graduates can apply to work in a hospital setting, physician office, clinic, nursing home, or home health agency. Median salary may be around $\$ 35,900$ depending on the type and size of facility, level of responsibility, and geographic region.

## To Learn More About This Program

Contact Julie Zabriskie at 269-782-1381 or jzabriskie@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, HIMS course, HEED course, MEDA course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |
| SPEE 104 | Introduction to Human <br> Communication | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 101 | Introductory Algebra | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 110 | Human Biology | 4 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| SOCI 240 | Minority Groups in America | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| HEED 101 | Medical Terminology | 3 credits |
| HEED 137 | Disease Overview | 3 credits |
| HIMS 101 | Introduction to Health Info <br> Management Systems | 4 credits |
| HIMS 180 | Health Care Law | 3 credits |
| HIMS 201 | ICD Coding | 4 credits |
| HIMS 202 | CPT Coding | 3 credits |
| HIMS 203 | Advanced Clinical Coding | 3 credits |
| HIMS 205 | Health Information <br> Management Science | 3 credits |
| HIMS 210 | Quality Assurance | 3 credits |
| HIMS 255 | Health Information <br> Technology Internship | 4 credits |
| HIMS 290 | Health Information <br> Technology Capstone | 2 credits |
| MEDA 221 | Insurance Claims <br> Processing | 3 credits |
| PHED 103 or |  |  |
| HEED 163 | Life Wellness or Nutrition | 2 credits |

## Additional Notes About the A.A.S. in Health Information Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need a higher-level math course, one additional science course (non-BIOL), two different social science courses, and one additional humanities course (nonSOCI). See advisor for specific details if the MTA is important to you to ensure proper course selection.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 <br> Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| HEED 101 Medical Terminology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 110 Human Biology | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| HIMS 101 Introduction to HIMS | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHED 103 Life Wellness or HEED 163 | 2 credits | PHED 103: None |
| Nutrition |  |  |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| HIMS 201 ICD Coding | 4 credits | BIOL 110; HEED 101; HEED 137; concurrent enrollment in HIMS 202 required |
| HIMS 202 CPT Coding | 3 credits | BIOL 110; HEED 101; HEED 137; concurrent enrollment in HIMS 201 required |
| HIMS 205 Health Information <br> Management Science | 3 credits | HIMS 101 |
| MEDA 221 Insurance Claims <br> Processing | 3 credits | MATH 101; HEED 101; SPEE 104 |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| HIMS 180 Health Care Law | 3 credits | HIMS 101; ENGL 115 or test score (concurrent enrollment allowed) |
| SOCI 240 Minority Groups in America | 3 credits | ENGL 103 or ENGL 103W |
| HIMS 210 Quality Assurance | 3 credits | HIMS 101 |
| HIMS 203 Advanced Clinical Coding | 3 credits | HIMS 201; HIMS 202 |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or 103W |

## FIFTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| HIMS 255 Health Information <br> Technology Internship | 4 credits | Minimum grade of "C" in all other courses required in HIT program; <br> concurrent enrollment in HIMS 290 required |
| HIMS 290 Health Information <br> Technology Capstone | 2 credits | Minimum grade of "C" in all other courses required in HIT program; <br> concurrent enrollment in HIMS 255 required |

## Associate in Applied Science in Industrial Technology

## Program Outcomes

Upon completion of this degree, students will have a well-rounded degree that will improve a student's cognitive thinking, problem solving, and communication skills.

## Employment Opportunities or Additional Educational Options

With this degree, graduates will be more prepared for employment opportunities in welding, robotics, construction trades, or technology fields. Graduates will also be more prepared for continuing their studies at many four-year institutions.

## To Learn More About This Program

Contact Allyson Starrett at 269-687-5646 or astarrett01@swmich.edu or Ferenc Sefcsik at 269-687-5673 or fsefcsik@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, have previously completed one of the following 30-34 credit hour certificate programs: Construction Trades Green Technology, Robotics, or Welding Technology, and complete a minimum of 60 total credit hours. Each course listed under the General Education Courses section below must be completed with a minimum grade of " C ". Additionally, each prerequisite course, internship, and capstone course must be completed with a final grade of " C " or better.

## General Education Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |
| SPEE 102 or <br> SPEE 104 | Fundamentals of Public <br> Speaking or Intro to Human <br> Communication | 3 credits |

## MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 101 or | Introductory Algebra or |  |
| MATH 102 | Mathematical Literacy | 4 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ISYS 110 | Introduction to Computer <br> Technology | 3 credits |
| INTE 227 | Industrial Robotics | 2 credits |
| INTE 255 | Internship | 3 credits |

Complete $\mathbf{6}$ credits from the list below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| Any CADD | Computer Aided Drafting <br> and Design Courses Not <br> Previously Completed | Varies |
| Any CONS | Construction Trades <br> Courses Not Previously <br> Completed | Varies |
| Any ELEC | Robotics Courses Not <br> Previously Completed | Varies |
| Any INTE | Industrial Technology <br> Courses Not Previously <br> Completed | Varies |
| Any WELD | Welding Technology <br> Courses Not Previously <br> Completed | Varies |
| PHED 103 | Life Wellness | 2 credits |

## Additional Notes About the A.A.S. in Industrial Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence section.
- This program as outlined does not meet MTA requirements. Students interested in satisfying the MTA need a higher-level math course, two natural science courses, two social science courses, and two humanities courses. To ensure proper course selection for MTA requirements, please see your advisor frequently.
- This program requires students to have previously earned a certificate in either Construction Trades Green Technology, Robotics, or Welding Technology.
- Students may need to complete additional courses to earn 60 total credits.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program. The certificate program a student chooses will make up the first two semesters of this degree program.

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 110 Introduction to Computer Technology | 3 credits | None |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 102 Fundamentals of Public Speaking or SPEE 104 Introduction to Human Communication | 3 credits | SPEE 102: None <br> SPEE 104: ENGL 115 or test score (concurrent enrollment allowed) |
| Program Elective | 3 to 4 credits | See Course Description for Details |
| Program Elective | 3 to 4 credits | See Course Description for Details |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or 103W |
| INTE 227 Industrial Robotics | 2 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| INTE 255 Internship | 3 credits | Completion of 30 technology credits with a minimum grade of C and |
| permission of the program advisor |  |  |

## Associate in Applied Science in Information Technology Networking

## Program Outcomes

Upon completion of this degree, students will gain the knowledge, skills, and abilities in networking that provide career opportunities or career advancement. This degree also provides the foundation for business and industry certifications.

## Employment Opportunities or Additional Educational Options

With this degree, students can seek employment in networking and hardware support or prepare for transfer to Ferris State University to complete a four-year degree in Computer Information Technology. If you wish to transfer to another college or university besides Ferris, please consult with your advisor frequently to determine specific course requirements.

## To Learn More About This Program

Contact Eric Clayborn at 269-783-2153 or eclayborn@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits | | MATHEMATICS |
| :---: | | Course ID |
| :---: |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ISYS 201 | IT Support | 3 credits |
| ISYS 207 | Managing and Maintaining <br> PCs | 4 credits |
| ISYS 271 | Networking Essentials | 3 credits |
| ISYS 272 | Configuring Windows <br> Devices | 3 credits |
| ISYS 281 | Installing Windows Server | 3 credits |
| ISYS 282 | Linux | 3 credits |
| ISYS 283 | Administering Windows | 3 credits |
| ISYS 284 | Advanced Windows Server | 3 credits |
| ISYS 285 | Network Security | 3 credits |

Complete either the Employment Ready Track or the Transfer Track to Ferris State University to continue studies in Computer Information Technology

## EMPLOYMENT READY TRACK

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 110 | Introduction to Computer <br> Technology | 3 credits |
| ISYS 255 | Internship | 3 credits |
| ISYS 260 | Wireless Communications | 3 credits |
| ISYS 288 | CISCO Routers and <br> Switches | 3 credits |
| ISYS 289 | Installing and Configuring <br> Windows | 3 credits |
| ISYS 200 or |  |  |
| ISYS 215 | Integrated Applications and <br> Technologies or Selected <br> Topics in Information <br> Technology | 3 credits |

TRANSFER TRACK TO FERRIS STATE UNIVERSITY (satisfies MTA and Ferris requirements)

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BISC 111 | Biological Science | 4 credits |
| ECON 202 | Microeconomics | 3 credits |
| GEOG 110 | Physical Geography | 4 credits |
| ISYS 115 | Programming Logic and <br> Design | 3 credits |
| PHIL 210 | Introduction to Ethics | 4 credits |
| SOCI 201 | Principles of Sociology | 3 credits |
| SOCI 240 | Minority Groups in America | 3 credits |

## Additional Notes About the A.A.S. in Information Technology Networking Program Employment Ready Track

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. Students who want to meet MTA requirements need to take two different natural science courses, two different social science courses, and two different humanities courses. Students should consult with an advisor to ensure proper course selection of these MTA-related courses.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110 Intro to Computer Technology | 3 credits | None |
| ISYS 207 Managing and Maintaining | 4 credits | None |
| ISYS 271 Networking Essentials | 3 credits | ISYS 207 (concurrent enrollment allowed) |
| ISYS 201 IT Support | 3 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 200 Small Business |  |  |
| Management |  |  |$\quad 3$ credits $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 272 Configuring Windows Devices | 3 credits | ISYS 281 |
| ISYS 283 Administering Windows Server | 3 credits | ISYS 281 |
| ISYS 288 CISCO Routers and Switches | 3 credits | ISYS 271 |
| ISYS 284 Advanced Windows Server | 3 credits | ISYS 281 |
| ISYS 285 Network Security | 3 credits | ISYS 207 (concurrent enrollment allowed) |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| ISYS 200 Integrated Apps and Tech <br> or ISYS 215 Selected Topics in <br> Information Technology | 3 credits | ISYS 200: ISYS 110 <br> ISYS 215: None |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| ISYS 255 Internship | 3 credits | BUSI 240 (concurrent enrollment allowed) |
| ISYS 289 Installing and Configuring |  |  |
| Windows | 3 credits | ISYS 281 |
| ISYS 282 Linux | 3 credits | None |

## Additional Notes About the A.A.S. in Information Technology Networking Transfer Track to Ferris State University

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 207 Managing and Maintaining <br> PCs | 4 credits | None |
| ISYS 271 Networking Essentials | 3 credits | ISYS 207 (concurrent enrollment allowed) |
| ISYS 201 IT Support | 3 credits | None |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $\mathrm{C}^{\prime \prime}$ Required) |
| :---: | :---: | :---: |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| GEOG 110 Physical Geography | 4 credits | None |
| PHIL 210 Introduction to Ethics | 4 credits | ENGL 103 or ENGL 103W |
| ISYS 281 Installing Windows Server | 3 credits | ISYS 207 and ISYS 271 |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 272 Configuring Windows Devices | 3 credits | ISYS 281 |
| ISYS 283 Administering Windows Server | 3 credits | ISYS 281 |
| ISYS 115 Programming Logic and Design | 3 credits | None |
| ISYS 284 Advanced Windows Server | 3 credits | ISYS 281 |
| ISYS 285 Network Security | 3 credits | ISYS 207 (concurrent enrollment allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BISC 111 Biological Science | 4 credits | None |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |
| SOCI 240 Minority Groups in America | 3 credits | ENGL 103 or ENGL 103W |
| ISYS 282 Linux | 3 credits | None |

## Associate in Applied Science in Information Technology Software Development

## Program Outcomes

Upon completion of this degree, students will have gained the knowledge, skills, and abilities that provide career opportunities and advancement in the field of programming and software development in information technology.

## Employment Opportunities or Additional Educational Options

With this degree, students can find employment in the IT industry or prepare for transfer to Ferris State University to continue studies in the four-year degree program, Computer Information Systems. If students are interested in another university for their four-year degree, they should consult with an advisor frequently to ensure courses will transfer to their institution of choice.

## To Learn More About This Program

Contact Christine Stiles at 269-782-1422 or cstiles@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or ENGL 103W | Freshman English 2 (or with workshop) | 3 to 4 credits |
| SPEE 102 | Fundamentals of Public Speaking | 3 credits |
| MATHEMATICS |  |  |
| Course ID | Course | Credits |
| MATH 127 or MATH 150 | College Algebra or Statistics | 4 credits |

Complete either the Employment Ready Track or the Transfer Track to Ferris State University to continue studies in Computer Information Systems

## EMPLOYMENT READY TRACK

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ENGL 104 | Freshman English 3 | 3 credits |
| ISYS 110 | Intro to Computer <br> Technology | 3 credits |
| ISYS 225 | C++ Programming | 3 credits |
| ISYS 228 | JAVA Programming 2 | 3 credits |
| ISYS 255 | Internship | 3 credits |
| ISYS 290 | Systems Analysis | 3 credits |
| Choose two | ISYS 182, ISYS 200, ISYS <br> 201, ISYS 215, ISYS 234, <br> ISYS 271, ISYS 281, ACCO <br> 201, or ACCO 202 | 5 to 8 <br> credits |

## Major-specific Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ISYS 115 | Programming Logic and <br> Design | 3 credits |
| ISYS 227 | JAVA Programming 1 | 3 credits |
| ISYS 229 | Scripting Languages | 3 credits |
| ISYS 241 | Web Development 1 | 3 credits |
| ISYS 251 | Web Development 2 | 3 credits |
| ISYS 275 | C\#/.NET Programming | 3 credits |
| ISYS 276 | Mobile Applications | 3 credits |
| ISYS 294 | Software Engineering 1 | 3 credits |

TRANSFER TRACK TO FERRIS STATE UNIVERSITY (satisfies MTA and Ferris requirements)

| Category | Course | Credits |
| :---: | :---: | :---: |
| BISC 111 | Biological Science | 4 credits |
| ECON 202 | Microeconomics | 3 credits |
| GEOG 110 | Physical Geography | 4 credits |
| ISYS 182 | Database 1 | 3 credits |
| ISYS 234 | Database 2 | 3 credits |
| PHIL 210 | Introduction to Ethics | 4 credits |
| SOCI 201 | Principles of Sociology | 3 credits |
| SOCI 240 | Minority Groups in America | 3 credits |

## Additional Notes About the A.A.S. in Information Technology Software Development Program Employment Ready Track

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need two difference natural science courses (one with a lab), two different social science courses, and two different humanities courses. If satisfying MTA requirements is important to you, please see an advisor for proper course selection.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " C " Required) |
| :---: | :---: | :---: |
| EDUC 120 Education Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110 Intro to Computer Technology | 3 credits | None |
| BUSI 200 Small Business Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 115 Programming Logic and Design | 3 credits | None |
| ISYS 241 Web Development 1 | 3 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| ISYS 275 C\#/.NET Programming | 3 credits | ISYS 115 |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or 103W |
| ISYS 229 Scripting Languages | 3 credits | ISYS 115 |
| Program Electives | 2 to 4 credits | See Course Descriptions for Details |
| SPEE 102 Fund of Public Speaking | 3 credits | None |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 227 JAVA Programming 1 | 3 credits | ISYS 115 or permission of chair |
| ISYS 276 Mobile Applications | 3 credits | ISYS 115 |
| ISYS 294 Software Engineering 1 | 3 credits | ISYS 115; ISYS 227 or ISYS 275 |
| Program Elective | 3 to 4 credits | See Course Descriptions for Details |
| MATH 127 College Algebra or MATH |  |  |
| 150 Statistics | 4 credits | MATH 127: MATH 101 or test score |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 225 C++ Programming | 3 credits | ISYS 115 |
| ISYS 251 Web Development 2 | 3 credits | ISYS 115 and ISYS 241 |
| ISYS 255 Internship | 3 credits | BUSI 240 (concurrent enrollment allowed) |
| ISYS 290 Systems Analysis | 3 credits | ISYS 115; ISYS 275 recommended |
| ISYS 228 JAVA Programming 2 | 3 credits | ISYS 227 |

## Additional Notes About the A.A.S. in Information Technology Software Development Program Transfer Track to Ferris State University

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

## FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 115 Programming Logic and <br> Design | 3 credits | None |
| ISYS 241 Web Development 1 | 3 credits | None |
| ISYS 182 Database 1 | 3 credits | None |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MATH 127 College Algebra or | 4 credits | MATH 127: MATH 101 or test score |
| MATH 150 Statistics | MATH 150: MATH 101, MATH 102, or test score |  |
| ISYS 275 C\#/.NET Programming | 3 credits | ISYS 115 |
| ISYS 229 Scripting Languages | 3 credits | ISYS 115 |
| ISYS 234 Database II | 3 credits | None |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 227 JAVA Programming 1 | 3 credits | ISYS 115 or permission of chair |
| ISYS 276 Mobile Applications | 3 credits | ISYS 115 |
| ISYS 294 Software Engineering 1 | 3 credits | ISYS 115; ISYS 227 or ISYS 275 |
| PHIL 210 Introduction to Ethics | 4 credits | ENGL 103 or ENGL 103W |
| SPEE 102 Fundamentals of Public |  |  |
| Speaking | 3 credits | None |
| FOURTH SEMESTER |  |  |
| Courses |  |  |
| GEOG 110 Physical Geography | 4 credits | Prerequisites (Minimum Grade of "C" Required) |
| ISYS 251 Web Development 2 | 3 credits | None |
| BISC 111 Biological Science | 4 credits | ISYS 115 and ISYS 241 |
| SOCI 240 Minority Groups in America | 3 credits | None |

## Associate in Applied Science in Medical Assisting

## Program Outcomes

Upon completion of this degree, students will be able to demonstrate competency in the administrative skills of an entry-level medical assistant by satisfying the learning outcomes and passing the required courses. Students will demonstrate competency through acceptable attitude, organization, time management skills, attire, and attendance as evidenced in the internship evaluations.

## Employment Opportunities or Additional Educational Options

With this degree, graduates can earn positions within hospitals, clinics, nursing homes, physicians' offices and home health care. An average salary for a medical assisting job is approximately $\$ 32,000 / \mathrm{yr}$.

## To Learn More About This Program

Contact Shelley Todd at 269-783-2148 or stodd@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each prerequisite course, HEED, and MEDA course must be completed with a grade of "C" or better.

## Prerequisite Courses

These courses serve as prerequisites for the program.

COMMUNICATIONS

| Course ID Course Credits <br> ENGL 103 or <br> ENGL 103W Freshman English 2 (or with <br> workshop) 3 to 4 <br> credits <br> ENGL 104 Freshman English 3 3 credits <br> SPEE 104 Intro to Human <br> Communication 3 creditsMATHEMATICS <br> Course ID <br> MATH 101 Introductory Algebra |
| :--- |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 110 | Human Biology | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| HEED 101 | Medical Terminology | 3 credits |
| HEED 137 | Disease Overview | 3 credits |
| ISYS 110 | Intro to Computer <br> Technology | 3 credits |
| MEDA 210 | Clinical Procedures | 5 credits |
| MEDA 211 | Pharmacology | 3 credits |
| MEDA 212 | Diagnostic and Lab <br> Procedures | 4 credits |
| MEDA 220 | Medical Office Procedures <br> and Administration | 3 credits |
| MEDA 221 | Insurance Claims <br> Processing | 3 credits |
| MEDA 240 | Clinical Internship | 3 credits |
| MEDA 250 | Administration Internship | 3 credits |
| MEDA 251 | Medical Assistant Seminar | 1 credit |
| OADM 137 | Keyboarding | 1 credit |
| OADM 138 | Formatting | 2 credits |
| OADM 142 | Intermediate Keyboarding | 3 credits |

Complete one of the following courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PHED 103 | Life Wellness | 2 credits |
| HEED 163 | Nutrition | 2 credits |

## Additional Notes About the A.A.S. in Medical Assisting Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need a higher-level math course, one additional science course (non-BIOL), one additional social science course (non-PSYC), and two different humanities courses. See advisor for specific details on course selection if the MTA is important to you.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and <br> Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 <br> credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 110 Human Biology | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| HEED 101 Medical Terminology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 104 Intro to Human |  |  |
| Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| OADM 137 Keyboarding | 1 credit |  |
| OADM 138 Formatting | 2 credits | Keyboarding competency or OADM 137 (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 110 Intro to Computer Tech | 3 credits | None |
| MATH 101 Introductory Algebra | 4 credits | MATH 098 or test score |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| OADM 142 Intermediate Keyboarding | 3 credits | Keyboarding and formatting competency or OADM 138; ISYS 110 <br> (concurrent enrollment allowed) |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MEDA 211 Pharmacology | 3 credits | BIOL 110; MATH 101; PSYC 101; HEED 101; SPEE 104 |
| MEDA 210 Clinical Procedures | 5 credits | BIOL 110; MATH 101; PSYC 101; HEED 101; SPEE 104 |
| MEDA 212 Diagnostic and Lab Proc. | 4 credits | BIOL 110; MATH 101; PYSC 101; HEED 101; SPEE 104 |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MEDA 220 Medical Office Procedures <br> and Administration | 3 credits | MATH 101; HEED 101; SPEE 104 |
| MEDA 221 Insurance Claims Processing | 3 credits | MATH 101; HEED 101; SPEE 104 |
| HEED 137 Disease Overview | 3 credits | HEED 101; BIOL 110; ENGL 115 or test score <br> (concurrent enrollment in ENGL 115 allowed) |
| PHED 103 Life Wellness or HEED 163 |  |  |
| Nutrition |  |  |

## FIFTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| MEDA 240 Clinical Internship | 3 credits | MEDA 210; MEDA 211; MEDA 212; Permission of the Dean |
| MEDA 250 Administration Internship | 3 credits | MEDA 220; MEDA 221; Permission of the Dean |
| MEDA 251 Medical Assistant Seminar | 1 credit | Concurrent enrollment in MEDA 240 or MEDA 250 |

## Associate in Applied Science in Nursing (LPN to RN)

## Program Outcomes

Upon completion of this degree, students will be prepared to sit for the licensure exam (NCLEX-RN) and provide total patient care.

## Employment Opportunities or Additional Educational Options

With this degree, graduates can earn positions within hospitals, clinics, nursing homes, physicians' offices and home health care.

## To Learn More About This Program

Contact the Academic Advising and Resource Center at 269-782-1303 or askanadvisor@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Each prerequisite course and major-specific course must be completed with a grade of " C " or better (BIOL 214 with a grade of " B " or better).

## Prerequisite Courses

These courses serve as prerequisites for the program.

COMMUNICATIONS

| $\begin{array}{\|c\|c\|c\|}\hline \text { Course ID } & \text { Course } & \text { Credits } \\ \hline \begin{array}{c}\text { ENGL 103 or } \\ \text { ENGL 103W }\end{array} & \begin{array}{c}\text { Freshman English 2 (or with } \\ \text { workshop) }\end{array} & \begin{array}{c}3 \text { to 4 } \\ \text { credits }\end{array} \\ \hline\end{array}$ |  |  |  |
| :--- | :---: | :---: | :---: |
| NATURAL SCIENCE |  |  |  |
| Course ID |  | Course | Credits |
| BIOL 214 |  |  |  | \(\left.\begin{array}{c}Basic Human Anatomy <br>


(grade of " \mathrm{B} " required)\end{array}\right] 4\) credits 

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| NURSING |  |  |
| Course ID | Course | Credits |
| NURS 167 | Principles of Medication <br> Administration | 2 credits |

Total Program Credits: 47.5 (Need 60 credits to graduate)

## Additional Notes About the A.A.S. in Nursing (LPN to RN) Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need a MTA-approved math course, one additional science course (non-BIOL), one additional social science course, and two different humanities courses. See advisor for specific details to ensure proper course selection if the MTA is important to you.
- Proficiency in math and chemistry is required for this program. Therefore, some student may be required to take MATH 101 and CHEM 100 in addition to the courses listed on the previous page.
- A student's active LPN license satisfies the NURS 166 Foundations in Nursing course, a prerequisite for many courses in this program.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 214 Basic Human Anatomy | 4 credits | BIOL 098, BIOL 101, BIOL 110, BIOL 202, BISC 111, or one year of high <br> school Biology with minimum grade of B taken within the last 5 years, or <br> test score |
| NURS 167 Principles of Medication <br> Administration | 2 credits | MATH 101 or test score; permission of Dean of Nursing |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BIOL 215 Principles of Human Physiology | 4 credits | BIOL 214; CHEM 100, or one year of high school chemistry with minimum grade of $B$ taken within the last 5 years, or test score |
| NURS 177 Psychosocial Nursing | 4 credits | NURS 166; BIOL 215; NURS 167 |
| NURS 178 Pharmacology 1 | 2 credits | NURS 166; BIOL 215; NURS 167 |
| NURS 180 Nursing Care of Adults 1 | 4.5 credits | NURS 166; BIOL 215; NURS 167 |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| NURS 201 Maternal and Women's <br> Health Nursing Care | 4 credits | NURS 177; NURS 178; NURS 180; |
| NURS 228 Pharmacology 2 | 2 credits | NURS 228 (concurrent enrollment allowed) |
| NURS 240 Nursing Care of Adults 2 | 4.5 credits | NURS 177; NURS 178; NURS 180 |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| NURS 202 Nursing Care of the Child | 4 credits | NURS 201; NURS 228; NURS 240; |
| NURS 212 (concurrent enrollment allowed) |  |  |

## Associate in Applied Science in Nursing (RN)

## Program Outcomes

Upon completion of this degree, students will be prepared to sit for the licensure exam (NCLEX-RN) and provide total patient care.

## Employment Opportunities or Additional Educational Options

With this degree, graduates can earn positions within hospitals, clinics, nursing homes, physicians' offices and home health care.

## To Learn More About This Program

Contact the Academic Advising and Resource Center at 269-782-1303 or askanadvisor@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Each prerequisite course and major-specific course must be completed with a grade of "C" or better (BIOL 214 with a grade of " B " or better).

## Prerequisite Courses

These courses serve as prerequisites for the program.
COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or | Freshman English 2 (or with | 3 to 4 |
| ENGL 103W | workshop) | credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 101 | Introductory Algebra | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 214 | Basic Human Anatomy <br> (grade of "B" required) | 4 credits |
| CHEM 100 | Fundamentals of Chemistry | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |

## Additional Notes About the A.A.S. in Nursing Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need a higher-level math course, one additional social science course (non-PSYC) and two humanities courses. See advisor for specific details if the MTA is important to you.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BIOL 214 Basic Human Anatomy | 4 credits | BIOL 098, BIOL 101, BIOL 110, BIOL 202, BISC 111, or one year of high <br> school Biology with minimum grade of B taken within the last 5 years, or <br> test score |
| CHEM 100 Fundamentals of |  |  |
| Chemistry |  |  |

## SECOND SEMESTER

$\begin{array}{|c|c|c|}\hline \text { Courses } & \text { Credits } & \text { Prerequisites (Minimum Grade of "C" Required) } \\ \hline \text { BIOL 215 Principles of Human } \\ \text { Physiology }\end{array} \quad 4$ credits $\left.\quad \begin{array}{c}\text { BIOL 214; CHEM 100, or one year of high school chemistry with } \\ \text { minimum grade of B taken within the last 5 years, or test score }\end{array}\right]$

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| NURS 178 Pharmacology 1 | 2 credits | NURS 166; BIOL 215; NURS 167 |
| NURS 177 Psychosocial Nursing | 4 credits | NURS 166; BIOL 215; NURS 167 |
| NURS 180 Nursing Care of Adults 1 | 4.5 credits | NURS 166; BIOL 215; NURS 167 |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| NURS 201 Maternal and Women's <br> Health Nursing Care | 4 credits | NURS 177; NURS 178; NURS 180; |
| NURS 228 Pharmacology 2 | 2 credits | NURS 228 (concurrent enrollment allowed) |
| NURS 240 Nursing Care of Adults 2 | 4.5 credits | NURS 177; NURS 178; NURS 180 |

FIFTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| NURS 202 Nursing Care of the Child | 4 credits | NURS 201; NURS 228; NURS 240; |
| NURS 212 Nursing Leadership | 2 credits | NURS 212 (concurrent enrollment allowed) |
| NURS 241 Nursing Care of Adults 3 | 4.5 credits | NURS 201; NURS 228; NURS 240 |

## Associate in Applied Science in Paralegal

## Program Outcomes

Upon completion of this degree, students will have experienced a well-rounded general education, including a concentration in paralegal coursework.

## Employment Opportunities or Additional Educational Options

With this degree, students can prepare to transfer to four-year institutions to continue their studies in paralegal or law disciplines or begin work in law offices.

## To Learn More About This Program

Contact Leon Letter at 269-782-1215 or lletter@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English II (or <br> with workshop) | 3 to 4 <br> credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 110 | Human Biology | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| POSC 201 | American Government | 3 credits |
| ECON 202 | Microeconomics | 3 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BUSI 207 | Business Law 1 | 3 credits |
| BUSI 208 | Business Law 2 | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 110 | Introduction to Computer <br> Technology | 3 credits |
| LEGA 102 | Law in the United States | 3 credits |
| LEGA 203 | Legal Research and Writing 1 | 3 credits |
| LEGA 204 | Legal Research and Writing 2 | 3 credits |
| LEGA 205 | Criminal Litigation | 3 credits |
| LEGA 206 | Civil Litigation | 3 credits |
| LEGA 220 | Torts | 3 credits |
| LEGA 230 | Wills, Trusts, and Probate | 3 credits |
| LEGA 240 | Bankruptcy | 3 credits |
| LEGA 255 | Internship | 3 credits |

## HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PHIL 210 | Introduction to Ethics | 4 credits |

## Additional Notes About the A.A.S. in Paralegal Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need an additional science course and an additional humanities course. See advisor for specific details if the MTA is important to you.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $\mathrm{C}^{\prime \prime}$ Required) |
| :---: | :---: | :---: |
| BIOL 110 Human Biology | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| LEGA 204 Legal Research \& Writing 2 | 3 credits | LEGA 203 |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| PHIL 210 Introduction to Ethics | 4 credits | ENGL 103 or ENGL 103W |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 207 Business Law 1 | 3 credits | None. BUSI 200 recommended. |
| BUSI 208 Business Law 2 | 3 credits | None. BUSI 200 and BUSI 207 recommended |
| ECON 202 Microeconomics | 3 credits | MATH 101, MATH 102, or test score |
| LEGA 220 Torts | 3 credits | LEGA 102; LEGA 203 |
| POSC 201 American Government | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| LEGA 205 Criminal Litigation | 3 credits | LEGA 102; LEGA 203 |
| LEGA 206 Civil Litigation | 3 credits | LEGA 102; LEGA 203 |
| LEGA 230 Wills, Trusts, and Probate | 3 credits | LEGA 102; LEGA 203 |
| LEGA 240 Bankruptcy | 3 credits | LEGA 102; LEGA 203 |
| LEGA 255 Internship | 3 credits | Permission of Internship Coordinator; <br> BUSI 240 (concurrent enrollment allowed) |

## Associate in Applied Science in Robotics

## Program Outcomes

Upon completion of this degree, students will be able to install, maintain and repair electrical and electronic equipment such as networked process controls, computer-controlled machinery three-phase motors and variable frequency motor drives, robots, and servos. Students will also gain competency in hydraulics, pneumatics and welding.

## Employment Opportunities or Additional Educational Options

This degree combined with experience can assist graduates with employment in today's manufacturing environment. Graduates wanting to transfer to four-year institutions should consult their advisor early as this program is not designed primarily for transferability.

## To Learn More About This Program

Contact Larry Holz at 269-687-5651 or lholz@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English II (or <br> with workshop) | 3 to 4 <br> credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |

## MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 127 | College Algebra | 4 credits |

Major-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and Planning | 1 credit |
| CADD 101 | Introduction to CAD/Auto CAD | 4 credits |
| ELEC 118 | Fundamentals of Electricity 1 | 4 credits |
| ELEC 119 | Fundamentals of Electricity 2 | 4 credits |
| ELEC 131 | Digital Electronics | 3 credits |
| ELEC 140 | Motors and Motor Control Circuits | 3 credits |
| ELEC 208 | Electronic Communications | 3 credits |
| ELEC 212 | Microprocessors | 4 credits |
| ELEC 218 | Process Control Instrumentation 1 | 3 credits |
| ELEC 233 | Programmable Logic Controllers | 2 credits |
| ELEC 234 | Advanced PLC and Motion Control | 2 credits |
| ELEC 255 | Internship | 2 credits |
| INTE 126 | Intro to Manufacturing Systems | 3 credits |
| INTE 159 | Hydraulics and Pneumatics | 3 credits |
| INTE 227 | Industrial Robotics | 2 credits |
| INTE 229 | Industrial Robotics Vision | 1 credit |
| INTE 245 | Robot Integration and Automation | 2 credits |
| WELD 159 | Basic Welding | 2 credits |

## Additional Notes About the A.A.S. in Robotics Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. A student would need two different science courses (one with a lab component), two different social science courses, and two different humanities courses. See advisor for specific details if the MTA is important to you.
- Some students may need to take other credits to earn the minimum of 60 credits needed for a degree.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ELEC 118 Fundamentals of Electricity 1 | 4 credits | MATH 101 or test score (concurrent enrolled allowed); ENGL 115 or test score (concurrent enrollment allowed); concurrent enrollment in ELEC 119 required |
| ELEC 119 Fundamentals of Electricity 2 | 4 credits | MATH 101 or test score (concurrent enrolled allowed); ELEC 118 (concurrent enrollment allowed); <br> ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 101 Intro Algebra (if needed) | 4 credits | MATH 098 or test score |
| ELEC 140 Motors and Motor Control Circuits | 3 credits | ELEC 118 and ELEC 119 (concurrent enrollment allowed); MATH 101 or test score (concurrent enrollment allowed); ENGL 115 or test score (concurrent enrollment allowed) |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ELEC 131 Digital Electronics | 3 credits | MATH 101 or test score; ELEC 118 and ELEC 119; <br> ENGL 115 or test score (concurrent enrollment allowed) |
| ELEC 218 Process Control <br> Instrumentation 1 | 3 credits | ELEC $118 ;$ ELEC $119 ;$ MATH 101 or test score; <br> ENGL 115 or test score (concurrent enrollment allowed) |
| ELEC 233 Programmable Logic <br> Controllers | 2 credits | MATH 101 or test score; ELEC 118 and ELEC 119; <br> ENGL 115 or test score (concurrent enrollment allowed) |
| INTE 159 Hydraulics and Pneumatics | 3 credits | MATH 101 or test score (concurrent enrollment allowed); <br> ENGL 115 or test score (concurrent enrollment allowed) |
| INTE 227 Industrial Robotics | 2 credits | ENGL 115 or test score (concurrent enrollment allowed) |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| CADD 101 Intro to CAD/Auto CAD | 4 credits | None |
| ELEC 234 Adv PLC and Motion Control | 2 credits | ELEC 233; MATH 127 or test score (concurrent enrollment allowed) |
| INTE 126 Intro to Manufacturing |  |  |
| Systems |  |  |$\quad 3$ credits $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ELEC 208 Electronic Communications | 3 credits | ELEC 119; MATH 127 or test score; ENGL 115 or test score <br> (concurrent enrollment allowed in ENGL 115) |
| ELEC 212 Microprocessors | 4 credits | ELEC 131; MATH 127 or test score; ENGL 115 or test score <br> (concurrent enrollment allowed in ENGL 115) |
| ENGL 103 or ENGL 103W Freshman <br> English 2 (or with workshop) | 3 to 4 <br> credits | ENGL 115 or test score (concurrent enrollment allowed) |
| INTE 245 Robot Integration and |  |  |
| Automation | 2 credits | INTE 159; INTE 227; ELEC 233 |
| ELEC 255 Internship | 2 credits | Completion of Robotics Certificate; recommendation of program advisor |

## Associate in Applied Science in Social Work

## Program Outcomes

Upon completion of this degree, students will have experienced a broad introduction to the field of social work. In coordination with the general education components, students will be able to communicate effectively in a variety of situations in the field, demonstrate knowledge of and apply behavioral science principles in a variety of cultural contexts, and appreciate the role of values in diverse cultural settings.

## Employment Opportunities or Additional Educational Options

This degree prepares students to work in the field while attaining a higher-level degree. The National Association of Social Workers provides the following as career options: case management aide, community outreach worker, gerontology aide, intake specialist, social work assistant, and victims advocate associate. Students should meet with their advisor frequently to discuss their specific needs.

## To Learn More About This Program

Contact Christi Young at 269-783-2106 or cyoung@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| ENGL 104 | Freshman English 3 | 3 credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BIOL 110 | Human Biology | 4 credits |
| ENST 112 | Environmental Science | 4 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| PSYC 101 | General Psychology | 3 credits |
| POSC 201 | American Government | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| SOCI 240 | Minority Groups in America | 3 credits |
| PHIL 210 | Introduction to Ethics | 4 credits |

## Additional Notes About the A.A.S. in Social Work Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Students should use caution when selecting electives as some courses may only transfer to one or two known schools (e.g., SOWK 205 will only transfer to Ferris State University).
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| SOWK 100 Introduction to Social Work | 3 credits | None |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BIOL 110 Human Biology | 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 104 Freshman English 3 | 3 credits | ENGL 103 or ENGL 103W |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SOWK 120 Social Work/Interview |  |  |
| Skills |  |  |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 215 Human Development and | 3 credits | PSYC 101 |
| Learning |  |  |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| SOCI 203 Marriage and Family | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SOCI 240 Minority Groups in America | 3 credits | ENGL 103 or ENGL 103W |
| SOWK 200 Social Welfare | 3 credits | SOWK 100 and SOWK 120 |
| SOWK 240 Field Experience | 3 credits | SOWK 100; SOWK 120; completion of 45 credit hours including specific |
| Program Elective | 3 credits | See Course Descriptions for Details |
| SOUR courses; recommendation of program advisor |  |  |

## Associate in Applied Science in Sports Management

## Program Outcomes

Upon completion of this degree, students will have gained a well-rounded general education degree and the understanding and skills needed in the sports management field.

## Employment Opportunities or Additional Educational Options

With this degree, students can apply for entry-level positions in facility and event management, sports and recreational programming, athletic coaching, sports media, and more. Students are encouraged to continue their education at four-year colleges to further refine their knowledge and abilities.

## To Learn More About This Program

Contact Richard Reynolds at 269-782-1333 or rreynolds03@swmich.edu.

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of "C" or better.

## General Education Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| SPEE 102 | Fundamentals of Public <br> Speaking | 3 credits |
| SPEE 104 | Introduction to Human <br> Communication | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 150 | Statistics | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BISC 111 | Biological Science | 4 credits |
| CHEM 100 | Fundamentals of Chemistry | 4 credits |

Major-specific Required Courses

| Course ID | Credits |  |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 220 | Marketing | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 110 | Introduction to Computer <br> Technology | 3 credits |
| PHED 101 | Physical Education Activity | 1 credit |
| PHED 103 | Life Wellness | 2 credits |
| PHED 111 | Introduction to Coaching | 3 credits |
| PHED 210 | Organization and <br> Administration of Sports | 3 credits |
| PHED 215 | Introduction to Recreation | 3 credits |
| PHED 280 | Practicum | 3 credits |

SOCIAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ECON 202 | Microeconomics | 3 credits |
| PSYC 101 | General Psychology | 3 credits |

HUMANITIES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HUMA 202 | Introduction to American <br> Pop Culture | 3 credits |
| PHIL 210 | Introduction to Ethics | 4 credits |

## Additional Notes About the A.A.S. in Sports Management Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BISC 111 Biological Science | 4 credits | None |
| BUSI 200 Small Business Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| PHED 103 Life Wellness | 2 credits | None |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 110 Intro to Computer <br> Technology | 3 credits | None |
| BUSI 220 Marketing | 3 credits | BUSI 200 or permission of appropriate Dean. BUSI 214 recommended |
| PSYC 101 General Psychology | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| SPEE 104 Introduction to Human <br> Communication | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| PHED 111 Introduction to Coaching | 3 credits | None |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| PHED 215 Introduction to Recreation | 3 credits | None |
| PHED 210 Organization and <br> Administration of Sports | 3 credits | None |
| CHEM 100 Fundamentals of |  |  |
| Chemistry |  |  | | credits | MATH 101, MATH 102, or test score (concurrent enrollment allowed); |
| :---: | :---: | :---: |
| ENED 115 or test score (concurrent enrollment allowed) |  |

## FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| PHED 280 Practicum | 3 credits | Permission of program advisor |
| PHIL 210 Introduction to Ethics | 4 credits | ENGL 103 or ENGL 103W |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| HUMA 202 Introduction to American |  |  |
| Pop Culture | 3 credits | ENGL 103 or ENGL 103W |

# Certificate, Specialty Certificate, and Specialty Credential Programs 

## Certificate in Automotive Technology

## Program Outcomes

Upon completion of this certificate, students will have experience in diagnosing and fixing many common automotive problems.

## Employment Opportunities or Additional Educational Options

With this certificate, students can prepare for employment as an automotive service technician in various settings such as automobile dealerships, independent service facilities, franchised repair facilities, and specialty shops. This program is certified by the National Institute for Automotive Excellence for ASE Master Technician certification. Students are strongly advised to complete the two-year associate degree program to enhance employment opportunities and improve longevity in the workforce. Salary ranges vary depending upon the type of position obtained, field of choice, and geographic region.

## To Learn More About This Program

Contact Jeff Robson at 269-783-2967 or jrobson01@swmich.edu or Kyle Shrock at 269-783-2123 or kschrock@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Courses listed below under "General Education Courses" must be completed with a final grade of "C" or better.

## General Education Courses

## COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or ENGL 103W | Freshman English 2 (or with workshop) | 3 to 4 credits |
| MATHEMATICS |  |  |
| Course ID | Course | Credits |
| MATH 101 or MATH 102 | Introductory Algebra or Mathematical Literacy | 4 credits |

Certificate-specific Required Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| AUTO 103 | Intro to Automotive <br> Technology | 3 credits |
| AUTO 116 | Brake Systems | 3 credits |
| AUTO 119 | Electrical I | 3 credits |
| AUTO 122 | Steering Suspension <br> Systems | 3 credits |
| AUTO 131 | Manual Transmissions | 3 credits |
| AUTO 147 | Engine Repair 1 | 3 credits |
| AUTO 222 | Electrical 2 | 3 credits |
| AUTO 227 | Engine Performance 1 | 3 credits |

## Additional Notes About the Certificate in Automotive Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Students in this certificate program routinely continue into the A.A.S. in Automotive Technology program.
- Students in the A.A.S. in Automotive Technology program complete this certificate automatically as a condition of fulfilling their A.A.S. degree.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC $120 \begin{gathered}\text { Educational Exploration } \\ \text { and Planning }\end{gathered}$ | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| AUTO 103 Intro to Automotive Technology | 3 credits | None |
| AUTO 119 Electrical 1 | 3 credits | None |
| AUTO 116 Brake Systems | 3 credits | None |
| AUTO 122 Steering and Suspension Systems | 3 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $\mathrm{C}^{\prime \prime}$ Required) |
| :---: | :---: | :---: |
| AUTO 131 Manual Transmissions | 3 credits | AUTO 103 |
| AUTO 147 Engine Repair 1 | 3 credits | AUTO 103 |
| AUTO 222 Electrical 2 | 3 credits | AUTO 103 and AUTO 119 |
| MATH 101 Introductory Algebra or <br> MATH 102 Mathematical Literacy | 4 credits | MATH 098 or test score |
| AUTO 227 Engine Performance 1 | 3 credits | AUTO 103 and AUTO 119 |

## Certificate in Construction Trades Green Technology

## Program Outcomes

Upon completion of this certificate, students will have a solid foundation in "green" technologies and practices related to construction. The curriculum is aligned with national competency standards and trade-specific skills as designated by the Michigan Residential Builder, Maintenance and Alteration Contractor license and local apprenticeship training programs. Students will develop the understanding and skills to build, inspect, and repair structures. Students will learn to effectively utilize trade-specific tools and equipment, learn how to read blueprints and plans, and develop the ability to manage projects while controlling costs.

## Employment Opportunities or Additional Educational Options

With this certificate, students can prepare to gain successful employment in the construction industry. Students are encouraged to earn the associate degree for a more thorough learning in the field which could enhance job opportunities and provide greater longevity in the industry. This program is not intended for transfer to other four-year institutions.

## To Learn More About This Program

Contact Larry Wilson at 269-783-2966 or Iwilson05@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Each prerequisite course and the internship must be completed with a minimum grade of "C."

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| CONS 114 | Intermediate Construction <br> Practices | 8 credits |
| CONS 115 | Construction Math | 2 credits |
| CONS 117 | Print Reading for <br> Construction Trades | 2 credits |
| CONS 130 | Interior and Exterior <br> Finishes | 3 credits |
| CONS 135 | Electrical and Mechanical <br> Systems | 3 credits |
| CONS 140 | Quantity and Cost <br> Estimating | 3 credits |
| CONS 145 | Administration and <br> Scheduling | 3 credits |
| CONS 255 | Internship | 3 credits |
| ISYS 110 | Intro to Computer <br> Technology | 3 credits |

Total Program Credits: 35

## Additional Notes About the Certificate in Construction Trades Green Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Course taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Students in this certificate program routinely continue into the A.A.S. in Construction Trades Green Technology program.
- Students in the A.A.S. in Construction Trades Green Technology program complete this certificate automatically as a condition of fulfilling their A.A.S. degree.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.
FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 200 Small Business Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| CONS 114 Intermediate Construction | 8 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| CONS 117 Print Reading for Construction Trades | 2 credits | None |
| ISYS 110 Introduction to Computer Technology | 3 credits | None |

SECOND SEMESTER
Courses
Credits
Prerequisites (Minimum Grade of " C " Required)

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| CONS 115 Construction Math | 2 credits | MATH 098 or test score |
| CONS 130 Interior and Exterior Finishes | 3 credits | None |
| CONS 135 Electrical and Mechanical Systems | 3 credits | None |
| CONS 140 Quantity and Cost Estimating | 3 credits | ISYS 110 |
| CONS 145 Administration and Scheduling | 3 credits | None |
| CONS 255 Internship | 3 credits | Minimum "C" grade in all first-semester Construction Trades Technology courses |

## Specialty Credential in Electrocardiogram (ECG) Technician

## Program Outcomes

Upon completion of this credential, students will be able to understand and operate the technology to trace the electrical impulses of the heart and keep patient charts organized for the physician.

## Employment Opportunities or Additional Educational Options

Employment opportunities increase when this skill is combined with another such as phlebotomy or CNA. Certification is not required, but will improve employment opportunities. One certification test is given locally.

## To Learn More About This Program

Contact the Office of First Year Experience at 269-782-1499.

## Credential Requirements

To earn this credential, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 4 credit hours.

Credential Course

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HEED 117 | ECG Technician | 4 credits |

## PREREQUISITES:

- Students are required to successfully complete the Accuplacer exam prior to registering for the course.
- No course prerequisites are required, but previous knowledge of medical terminology is helpful.
- This position requires students to be on their feet for most of the shift. Students should be able to lift more than 50 lbs .
- Students must apply for admission in advance. Available seats are limited. See the Program Contact for specifics and application deadlines.
- Students will be required to undergo a criminal background check and drug screening. Students concerned with possible findings on their background check should talk to the Dean of the School of Nursing and Health Services before registering for the class.
- Students who have previously failed this class will not be able to repeat the course.


## PROGRAM REQUIREMENTS:

- Students must successfully complete both the theory and lab portions to be eligible for the licensing examination.
- Students must have access to reliable transportation to complete clinical assignments.
- Students are expected to demonstrate proof of required immunizations. See program advisor for specifics.
- The course is offered only Spring Semester on the Dowagiac campus.


## Specialty Certificate in Emergency Medical Technician

## Program Outcomes

Upon completion of this certificate, students will have gained the knowledge and skills practiced by many EMT health care professionals.

## Employment Opportunities or Additional Educational Options

After successful completion of both the written and practical components of the two courses below, students are eligible to take the Michigan Department of Public Health, Division of Emergency Medical Services and Licensure Examination for Emergency Medical Technicians. One certification test is given locally.

## To Learn More About This Program

Contact the Office of First Year Experience at 269-782-1499.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 10 credit hours.

## Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HEED 131 | Emergency Medical <br> Technician 1 | 5 credits |
| HEED 132 | Emergency Medical <br> Technician 2 | 5 credits |

## PREREQUISITES:

- Students are required to successfully complete the Accuplacer exam prior to registering for the course.
- No course prerequisites are required, but previous knowledge of medical terminology is helpful.
- This position requires students to be on their feet for most of the shift. Students should be able to lift more than 50 lbs .
- Students who have previously failed this class will not be able to repeat the course.


## PROGRAM REQUIREMENTS:

- Students must successfully complete both the theory and lab portions of both courses to be eligible for the licensing examination.
- Students must have access to reliable transportation to complete clinical assignments.
- Students are expected to demonstrate proof of required immunizations, CPR certification, and a negative TB test. See program advisor for specifics.
- HEED 131 is offered in the Fall Semester only.
- HEED 132 is offered in the Spring Semester only.
- Prior to HEED 132, students will be required to undergo a criminal background check and drug screening. Students concerned with possible findings on their background check should talk to the Dean of the School of Nursing and Health Services before registering for the class.


## Certificate in Fire Science

## Program Outcomes

Upon completion of this certificate, students will have improved writing skills and demonstrated competency in important general education requirements. This certificate was created as a jump-start program for the already-certified firefighter, recognizing their technical certifications.

## Employment Opportunities or Additional Educational Options

With this certificate, students will take important steps toward the future goal of achieving the A.A.S. in Fire Science degree from SMC.

## To Learn More About This Program

Contact the Niles Campus Student Services Center at 800-456-8675, ext. 4811 or niles@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, each General Education course and prerequisite course must be completed with a minimum grade of "C."

## General Education and Certificate Courses

COMMUNICATIONS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credit |
| ENGL 104 | Freshman English 3 | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| MATH 101 | Introductory Algebra | 4 credits |

NATURAL SCIENCE

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| CHEM 100 | Fundamentals of Chemistry | 4 credits |

FIRE SCIENCE COURSES

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| FISC 102 | Firefighting 2 | 12 credits |
| HEED 131 | Emergency Medical <br> Technician 1 | 5 credits |
| HEED 132 | Emergency Medical <br> Technician 2 | 5 credits |

Total Program Credits: $\mathbf{3 6}$

## Additional Notes About the Certificate in Fire Science Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog.
- Students must submit Firefighter 1 and 2 certification to receive 12 credits for the FISC 102 course.
- In the first semester, students will typically enroll in Freshman English 2, Emergency Medical Technician 1, and Introductory Algebra.
- In the second semester, students will typically enroll in Fundamentals of Chemistry, Freshman English 3, and Emergency Medical Technician 2.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Certificate in Information Technology Help Desk

## Program Outcomes

Upon completion of this certificate, students will be able to provide Level One support in information technology. This certificate provides the foundation for business and industry certifications.

## Employment Opportunities or Additional Educational Options

With this certificate, students can take important steps toward employment opportunities in IT Help Desk Support. Employability should be enhanced with continuation into associate degree programs.

## To Learn More About This Program

Contact Eric Clayborn at 269-782-2153 or eclayborn@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, the ENGL 103 (or ENGL 103W) course, the SPEE 102 course, and any prerequisite courses must be completed with a minimum grade of "C."

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 | 3 to 4 <br> credits |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 110 | Intro to Computer <br> Technology | 3 credits |
| ISYS 115 | Programming Logic and <br> Design | 3 credits |
| ISYS 200 | Integrated Applications and <br> Technologies | 3 credits |
| ISYS 201 | IT Support | 3 credits |
| ISYS 207 | Managing and Maintaining <br> PCs | 4 credits |
| ISYS 271 | Networking Essentials <br> SPEE 102 | 3 credits |
| Fundamentals of Public <br> Speaking | 3 credits |  |

Complete one of the following courses listed below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| ISYS 215 | Selected Topics in <br> Information Technology | 2 to 3 <br> credits |
| ISYS 241 | Introduction to Web <br> Development | 3 credits |
| ISYS 260 | Wireless Communications | 3 credits |
| ISYS 276 | Mobile Applications | 3 credits |
| ISYS 281 | Installing Windows Server | 3 credits |

Total Program Credits: 32 to 33

## Additional Notes About the Certificate in Information Technology Help Desk Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 200 Small Business Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| ISYS 110 Introduction to Computer Technology | 3 credits | None |
| ISYS 115 Programming Logic and | 3 credits | None |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 200 Integrated Applications and <br> Technologies | 3 credits | ISYS 110 |
| ISYS 201 IT Support | 3 credits | None |
| ISYS 207 Managing and Maintaining <br> PCs | 4 credits | None |
| ISYS 271 Networking Essentials | 3 credits | ISYS 207 (concurrent enrollment allowed) |
| Program Electives | 2 to 3 credits | See Course Description for Details |

## Certificate in Information Technology System Administrator

## Program Outcomes

Upon completion of this certificate, students will have the foundation for industry certifications from CompTIA, Microsoft, and Cisco.

## Employment Opportunities or Additional Educational Options

With this certificate, students will be able to enhance their employability by continuing in one of the associate degree programs at SMC. This certificate also gives graduates career opportunities and advancement in the field of systems administration in IT.

## To Learn More About This Program

Contact Randy Flory at 269-782-1377 or rflory@swmich.edu or Eric Clayborn at 269-782-2153 or eclayborn@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, each prerequisite course must be completed with a minimum grade of "C."

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 207 | Managing and Maintaining <br> PCs | 4 credits |
| ISYS 260 | Wireless Communications | 3 credits |
| ISYS 271 | Networking Essentials | 3 credits |
| ISYS 272 | Configuring Windows <br> Devices | 3 credits |
| ISYS 281 | Installing Windows Server | 3 credits |
| ISYS 283 | Administering Windows <br> Server | 3 credits |
| ISYS 284 | Advanced Windows Server | 3 credits |
| ISYS 285 | Network Security | 3 credits |
| ISYS 288 | CISCO Routers and <br> Switches | 3 credits |
| ISYS 289 | Installing and Configuring <br> Windows | 3 credits |

Total Program Credits: $\mathbf{3 3}$

## Additional Notes About the Certificate in Information Technology System Administrator Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 207 Managing and Maintaining <br> PCs | 4 credits | None |
| ISYS 271 Networking Essentials | 3 credits | ISYS 207 (concurrent enrollment allowed) |
| ISYS 285 Network Security | 3 credits | ISYS 207 |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| ISYS 260 Wireless Communications | 3 credits | ISYS 207 |
| ISYS 281 Installing Windows Server | 3 credits | ISYS 207 and ISYS 271 |
| ISYS 289 Installing and Configuring <br> Windows | 3 credits | ISYS 281 |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ISYS 272 Configuring Windows Devices | 3 credits | ISYS 281 |
| ISYS 283 Administering Windows Server | 3 credits | ISYS 281 |
| ISYS 284 Advanced Windows Server | 3 credits | ISYS 281 |
| ISYS 288 CISCO Routers and Switches | 3 credits | ISYS 271 |

## Certificate in Medical Assisting Clinical

## Program Outcomes

Upon completion of this certificate, students will demonstrate competency in the clinical skills of an entry-level medical assistant; demonstrate professionalism through acceptable attitude, organization, time management skills, attire, and attendance; and demonstrate effective communication with patients, family, and the healthcare team.

## Employment Opportunities or Additional Educational Options

With this certificate, students can apply for positions as medical assistants in the clinical side of a medical office or clinic.

## To Learn More About This Program

Contact Shelley Todd at 269-783-2148 or stodd@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, each general education course and prerequisite course must be completed with a minimum grade of "C." Talk to an advisor for specific details.

## Prerequisites Courses

All prerequisite courses must be satisfied prior to enrollment in the MEDA courses.

Prerequisites Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| SPEE 104 | Intro to Human <br> Communication | 3 credits |
| MATH 101 | Introductory Algebra | 4 credits |
| BIOL 110 | Human Biology | 4 credits |
| PSYC 101 | General Psychology | 3 credits |
| HEED 101 | Medical Terminology | 3 credits |

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HEED 137 | Disease Overview | 3 credits |
| ISYS 110 | Intro to Computer <br> Technology | 3 credits |
| MEDA 210 | MA Clinical Procedures | 5 credits |
| MEDA 211 | MA Pharmacology | 3 credits |
| MEDA 212 | MA Diagnostic and Lab <br> Procedures | 4 credits |
| MEDA 240 | MA Clinical Internship | 3 credits |

Total Program Credits: 39

## Additional Notes About the Certificate in Medical Assisting Clinical Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisites requirements are listed in the Course Description section in the Course Catalog.
- All prerequisites must be satisfied with final grades of " $C$ " or better in each before enrolling in any MEDA courses.
- Course taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Certificate in Medical Assisting Office

## Program Outcomes

Upon completion of this certificate, students will demonstrate competency in the office skills of an entry-level medical assistant; demonstrate professionalism through acceptable attitude, organization, time management skills, attire, and attendance; and demonstrate effective communication with patients, family, and the healthcare team.

## Employment Opportunities or Additional Educational Options

With this certificate, students can apply for positions as medical assistants in the office side of a medical office or clinic.

## To Learn More About This Program

Contact Shelley Todd at 269-783-2148 or stodd@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, each general education course and prerequisite course must be completed with a minimum grade of "C."

## Prerequisite Courses

All prerequisites courses must be satisfied prior to enrollment in the MEDA courses.

## Prerequisite Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| SPEE 104 | Intro to Human <br> Communication | 3 credits |
| MATH 101 | Introductory Algebra | 4 credits |
| HEED 101 | Medical Terminology | 3 credits |

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HEED 137 | Disease Overview | 3 credits |
| ISYS 110 | Intro to Computer <br> Technology | 3 credits |
| MEDA 220 | Medical Office <br> Administration | 3 credits |
| MEDA 221 | Insurance Claims <br> Processing | 3 credits |
| MEDA 250 | Medical Assisting <br> Administration Internship | 3 credits |
| OADM 137 | Keyboarding | 1 credit |
| OADM 138 | Formatting | 2 credits |
| OADM 142 | Intermediate Keyboarding | 3 credits |
| PSYC 101 | General Psychology | 3 credits |

Total Program Credits: 35

## Additional Notes About the Certificate in Medical Assisting Office Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog.
- All prerequisites must be satisfied with final grades of " $C$ " or better in each before enrolling in any MEDA courses.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Specialty Credential in Nursing Assistant (CNA)

## Program Outcomes

Upon completion of this credential program, students will be able to pass a certification exam and provide basic health care to long-term care for patients under the direction of a Licensed Practical Nurse (LPN) or Registered Nurse (RN). Skills gained in the program include giving baths, making beds, dressing the patient, helping the patient to walk, measuring vital signs and feeding the patient.

## Employment Opportunities or Additional Educational Options

This credential will help students become employed as CNAs in extended care facilities (nursing homes) or home health care agencies. The credential meets the requirements of the Michigan Department of Public Health and leads to registry in the state of Michigan.

## To Learn More About This Program

Contact the Office of First Year Experience at 269-782-1499.

## Credential Requirements

To earn this credential, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 4 credit hours.

Credential Course

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HEED 120 | Nurses Assistant | 4 credits |

## PREREQUISITES:

- Students are required to successfully complete the Accuplacer exam prior to registering for the course.
- No course prerequisites are required, but previous knowledge of medical terminology is helpful.
- This position requires students to be on their feet for most of the shift. Students should be able to lift more than 20 lbs .
- Students will be required to undergo a criminal background check and drug screening. Students concerned with possible findings on their background check should talk to the Dean of the School of Nursing and Health Sciences before registering for the class.


## PROGRAM REQUIREMENTS:

- One 84-hour course is required for this certificate. Students must successfully complete both the theory and lab portions to be eligible for completion and employment.
- Students are expected to demonstrate proof of required immunizations. See program advisor for specifics.
- Students missing more than four hours of class will be asked to withdraw.


## REGISTRY:

- Students must complete the mandatory skill and theory testing at the completion of the course to become eligible for the registry. The state-approved skill and theory testing is held on the Dowagiac campus.
- Students must be registered with the state of Michigan within three months of their original employment to stay employed.
- Once registered, it is the student's responsibility to maintain this status.


## Certificate in Office Assistant/Specialist

## Program Outcomes

Upon completion of this certificate program, students will be able to compose routine correspondence, edit documents and recommend revisions, operate office equipment, schedule appointments, and maintain proper electronic files.

## Employment Opportunities or Additional Educational Options

This certificate will help students prepare for employment as administrative assistants, receptionists, office clerks, and secretaries. Students can continue into other degree paths at two-year or four-year schools. See your advisor frequently if additional education is your plan.

## To Learn More About This Program

Contact James Benak at 269-782-1221 or jbenak@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, the ENGL 103 (103W) course and any prerequisite courses must be completed with a minimum grade of "C."

## Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ENGL 103 or <br> ENGL 103W | Freshman English 2 (or with <br> workshop) | 3 to 4 <br> credits |
| MATH 102 | Mathematical Literacy | 4 credits |
| ACCO 201 | Principles of Accounting 1 | 4 credits |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 214 | Business Communications | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 110 | Intro to Computer <br> Technology | 3 credits |
| ISYS 181 | Spreadsheets | 3 credits |
| ISYS 200 | Integrated Applications and <br> Technologies | 3 credits |
| OADM 137 | Keyboarding | 1 credit |
| OADM 138 | Formatting | 2 credits |
| OADM 142 | Intermediate Keyboarding | 3 credits |

Total Program Credits: $\mathbf{3 4}$

## Additional Notes About the Certificate in Office Assistant/Specialist Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 200 Small Business Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| ISYS 110 Intro to Computer Technology | 3 credits | None |
| MATH 102 Mathematical Literacy | 4 credits | MATH 098 or test score |
| OADM 137 Keyboarding (early end class) | 1 credit | None |
| OADM 138 Formatting (late start | 2 credits | None |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ACCO 201 Principles of Accounting 1 | 4 credits | BUSI 200 (concurrent enrollment allowed) |
| BUSI 214 Business Communications | 3 credits | BUSI 200; ENGL 103 or ENGL 103W |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| ISYS 200 Integrated Applications and <br> Technologies | 3 credits | OADM 138 or ISYS 110 |
| ISYS 181 Spreadsheets | 3 credits | ISYS 110 |
| OADM 142 Intermediate Keyboarding | 3 credits | Keyboarding and formatting competency or OADM 138; ISYS 110 <br> (concurrent enrollment allowed) |

## Specialty Certificate in Phlebotomy

## Program Outcomes

Upon completion of this certificate, students will be able to draw blood from the patient so various laboratory work can be performed to aid the physician with treatment.

## Employment Opportunities or Additional Educational Options

This certificate prepares students for work as a phlebotomist working mainly in clinics, physician's offices or hospitals. Some home health agencies hire phlebotomists who also have nurse aide skills.

## To Learn More About This Program

Contact Jillian Taylor at 269-782-1236 or jbrown35@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 9 credit hours.

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| HEED 116 | Phlebotomy | 5 credits |
| HEED 251 | Phlebotomy Clinical | 4 credits |

## PREREQUISITES:

- Students are required to successfully complete the Accuplacer exam prior to registering for the course.
- No course prerequisites are required, but previous knowledge of medical terminology is helpful.
- This position requires students to be on their feet for most of the shift. Students should be able to lift more than 50 lbs .
- Students will be required to undergo a criminal background check and drug screening. Students concerned with possible findings on their background check should talk to the Dean of the School of Nursing and Health Sciences before registering for the class.
- Students must apply for separate admission in advance by obtaining an application packet in the Office of First Year Experience. Available seats are limited. See the program contact for specifics and application deadlines.
- Students who have previously failed this class will not be able to repeat the course.


## PROGRAM REQUIREMENTS:

- Students must successfully complete both the theory and lab portions of both courses to be eligible for the licensing examination.
- Students must have access to reliable transportation to complete clinical assignments.
- Students are expected to demonstrate proof of required immunizations. See program advisor for specifics.
- Students must pass the CPR course that is given within the Phlebotomy class.
- The course is offered only Spring Semester on the Dowagiac campus.


## Certificate in Robotics

## Program Outcomes

Upon completion of this certificate, students will gain an understanding of the role of service technicians and develop skills to install, maintain, and repair industrial control and electronic equipment used in offices, factories, homes, hospitals, aircraft and other industries.

## Employment Opportunities or Additional Educational Options

With this certificate, students can pursue entry-level career opportunities as electricians, maintenance technicians, and field service technicians in facilities utilizing industrial equipment, electrical controls, pneumatic/hydraulic systems and medical diagnostic equipment.

## To Learn More About This Program

Contact Larry Holz at 269-687-5651 or Iholz@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, each general education course and prerequisite course must be completed with a minimum grade of "C."

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ELEC 118 | Fundamentals of Electricity <br> 1 | 4 credits |
| ELEC 119 | Fundamentals of Electricity <br> 2 | 4 credits |
| ELEC 131 | Digital Electronics | 3 credits |
| ELEC 140 | Motors and Motor Control <br> Circuits | 3 credits |
| ELEC 218 | Process Control <br> Instrumentation 1 | 3 credits |
| ELEC 233 | Programmable Logic <br> Controllers | 2 credits |
| INTE 159 | Hydraulics and Pneumatics | 3 credits |
| INTE 227 | Industrial Robotics | 2 credits |
| MATH 101 | Introductory Algebra | 4 credits |
| WELD 159 | Basic Welding | 2 credits |

Total Program Credits: 31

## Additional Notes About the Certificate in Robotics Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration and <br> Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ELEC 118 Fundamentals of Electricity 1 | 4 credits | MATH 101 or test score (concurrent enrolled allowed); ENGL 115 or test <br> score (concurrent enrollment allowed); concurrent enrollment in ELEC <br> 119 required |
| ELEC 119 Fundamentals of Electricity 2 | 4 credits | MATH 101 or test score (concurrent enrolled allowed) ELEC 118 <br> (concurrent enrollment allowed); ENGL 115 or test score (concurrent <br> enrollment allowed) |
| ELEC 140Motors and Motor Control <br> Circuits | 3 credits | ELEC 118 and ELEC 119 (concurrent enrollment allowed); MATH 101 or <br> test score (concurrent enrollment allowed); ENGL 115 or test score <br> (concurrent enrollment allowed) |
| MATH 101 Introductory Algebra | 4 credits | MATH 098 or test score |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| ELEC 131 Digital Electronics | 3 credits | MATH 101 or test score; ELEC 118 and ELEC 119; ENGL 115 or test |
| score (concurrent enrollment allowed) |  |  |

## Specialty Certificate in Small Business Management/Entrepreneurship

## Program Outcomes

Upon completion of this certificate, students will get a broad overview of running a business as well as the necessary skills to help the accounting and record keeping aspects of the business.

## Employment Opportunities or Additional Educational Options

With this certificate, students can possibly start a small business or go to work in a small business. Students could also take the credits earned in the certificate program and apply them to the pursuit of an associate degree.

To Learn More About This Program
Contact James Benak at 269-782-1221 or jbenak@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 21 credit hours. Additionally, each prerequisite course and the internship (if selected as an elective) must be completed with a minimum grade of "C."

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ACCO 201 | Principles of Accounting 1 | 4 credits |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 210 | Personal Finance | 3 credits |
| BUSI 220 | Marketing | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |

Complete 2 courses from the list below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BUSI 212 | Supervision | 3 credits |
| BUSI 214 | Business Communication | 3 credits |
| BUSI 225 | Human Resource <br> Management | 3 credits |
| BUSI 255 | Internship | 3 credits |
| ISYS 110 | Intro to Computer <br> Technology | 3 credits |
| ISYS 181 | Spreadsheets | 3 credits |

Total Program Credits: 21

## Additional Notes About the Certificate in Small Business Management/Entrepreneurship Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| ACCO 201 Principles of Accounting 1 | 4 credits | BUSI 200 (concurrent enrollment allowed) |
| BUSI 200 Small Business <br> Management | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 210 Personal Finance | 3 credits | None |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of " $C^{\prime \prime}$ Required) |
| :---: | :---: | :---: |
| BUSI 220 Marketing | 3 credit | BUSI 200 or permission of Dean. BUSI 214 recommended |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| Program Elective | 3 credits | See Course Description for Details |
| Program Elective | 3 credits | See Course Description for Details |

## Certificate in Tribal Leadership

## Program Outcomes

Upon completion of this certificate, students will be able to make an immediate contribution to their work in tribal government or tribal enterprise. Additionally, students will gain a broad understanding of business as well as specific applications in tribal settings.

## Employment Opportunities or Additional Educational Options

This certificate has been designed to enable students to make an immediate contribution or future contribution to tribal government or business enterprise. Gainful Employment information about educational debt, earnings, and completion rates of students who attended this program previously can be found online at https://www.swmich.edu/academics/employment.

## To Learn More About This Program

Contact the Office of First Year Experience at 269-782-1499.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, HIST 248 and any prerequisite courses must be completed with a minimum grade of " C ".

Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| ACCO 201 | Principles of Accounting 1 | 4 credits |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 201 | Principles of Management | 3 credits |
| BUSI 207 | Business Law I | 3 credits |
| ENGL 228 | Proposal Writing | 3 credits |
| HIST 248 | Native American History | 3 credits |
| SOCI 248 | American Indian Studies <br> and Policy | 3 credits |

Complete at least 2 courses from the list below

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| BDWI 101 | Introductory Potawatomi <br> Language | 3 credits |
| BDWI 201 | Intermediate Potawatomi <br> Language | 3 credits |
| BUSI 220 | Marketing | 3 credits |
| ECON 201 | Macroeconomics | 3 credits |
| ECON 202 | Microeconomics | 3 credits |
| PSYC 215 | Organizational Psychology | 3 credits |

## Total Program Credits: 29

## Additional Notes About the Certificate in Tribal Leadership Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration |  |  |
| and Planning |  |  |$\quad 1$ credit $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 201 Principles of Management | 3 credits | BUSI 200 |
| BUSI 207 Business Law 1 | 3 credits | None. BUSI 200 recommended |
| ENGL 228 Proposal Writing | 3 credits | ENGL 103 or ENGL 103W |
| SOCI 248 American Indian Studies <br> and Policy | 3 credits | ENGL 115 or test score (concurrent enrollment allowed) |
| Program Elective | 3 credits | See Course Description for Details |

## Certificate in Welding Technology

## Program Outcomes

Upon completion of this certificate, students will be able to have marketable welding skills, will have understanding of quality control, process control and problem solving, and experience with the newest technological advances.

## Employment Opportunities or Additional Educational Options

This certificate program can be used as the first year of the A.A.S. in Industrial Technology degree. Students wishing to complete an associate degree are encouraged to earn this certificate at SMC first. The certificate program will also prepare students for employment in areas such as welding fitters, welding inspectors, production welding, maintenance welding, and set-up operators.

## To Learn More About This Program

Contact Ferenc Sefcsik at 269-687-5673 or fsefcsik@swmich.edu or Allyson Starrett at 269-687-5646 or astarrett01@swmich.edu.

## Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, each general education course and prerequisite course must be completed with a minimum grade of "C."

## Certificate Courses

| Course ID | Course | Credits |
| :---: | :---: | :---: |
| EDUC 120 | Educational Exploration and <br> Planning | 1 credit |
| BUSI 200 | Small Business <br> Management | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| CONS 115 | Construction Math | 2 credits |
| INTE 227 | Industrial Robotics | 2 credits |
| WELD 159 | Basic Welding | 2 credits |
| WELD 168 | Welder Certification <br> Preparation | 2 credits |
| WELD 169 | GMAW/MIG Welding | 4 credits |
| WELD 170 | Industrial Welding | 2 credits |
| WELD 175 | GTAW/TIG Welding | 4 credits |
| WELD 180 | SMAW/Stick Welding | 4 credits |
| WELD 235 | Metallurgy for Welders | 2 credits |
| WELD 265 | Thermal Cutting Processes | 2 credits |
| WELD 277 | Welding Fabrication and <br> Maintenance Repair | 2 credits |
| WELD 279 | Welding and Inspection | 2 credits |

Total Program Credits: 35

## Additional Notes About the Certificate in Welding Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.


## Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| EDUC 120 Educational Exploration <br> and Planning | 1 credit | ENGL 115 or test score (concurrent enrollment allowed) |
| BUSI 240 Professionalism Workshop | 1 credit | None |
| WELD 159 Basic Welding | 2 credits | MATH 098 or test score (concurrent enrollment allowed) |
| WELD 169 GMAW/MIG Welding | 4 credits | WELD 159 (concurrent enrollment allowed) |
| WELD 170 Industrial Welding | 2 credits | WELD 159 (concurrent enrollment allowed) |
| WELD 175 GTAW/TIG Welding | 4 credits | WELD 159 (concurrent enrollment allowed) |
| WELD 235 Metallurgy for Welders | 2 credits | None |
| WELD 265 Thermal Cutting Processes | 2 credits | None |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of "C" Required) |
| :---: | :---: | :---: |
| BUSI 200 Small Business |  |  |
| Management |  |  |$\quad 3$ credits $\quad$ ENGL 115 or test score (concurrent enrollment allowed)

## Course Descriptions

## Accounting

## ACCO 201 Principles of Accounting 1

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer. Prerequisite: Minimum grade of C in BUSI 200, concurrent enrollment allowed.

Covers the principles of accounting with an emphasis on financial accounting for sole proprietorships, also including partnerships and corporations, the accounting cycle, financial statements, worksheets, adjusting and closing entries, service and merchandising enterprises, special journals, subsidiary ledgers, cash, voucher system, receivables, inventory, plant assets, payables, payroll and theory.

## ACCO 202 Principles of Accounting 2

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ACCO 201.
A continuation of ACCO 201, with emphasis on financial and managerial accounting, corporate accounting stocks, bonds, longterm investments, consolidation, cash flow statements, financial statement analysis, job order and process cost systems, standard cost systems, budgeting, cost-volume-profit relationships, responsibility accounting, differential analysis and capital investments analysis.

## ACCO 203 Federal Income Tax

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ACCO 201 or permission of appropriate Dean.

Places an emphasis on theory and practice on the Federal Income Tax as it applies to individuals. Principles and theory are stressed, but practice is given in realistic problems and the use of correct tax forms.

## ACCO 204 Microcomputer Accounting Applications

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ACCO 201 and ISYS 110.

Uses the operation of a microcomputer-based accounting system to maintain a general ledger, accounts receivable and payable, inventory, and payrolls as well as preparing computerized financial statements and reports.

## ACCO 211 Intermediate Accounting 1

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ACCO 202.
A study of the valuation of current assets, current liabilities, plant equipment and depreciation techniques with their effect on income.

## ACCO 212 Intermediate Accounting 2

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ACCO 211.
Covers the measurement of liabilities, stockholders' equity and reserves, cash flow, analysis of internal profits, ratios and reserves, and financial statement analysis.

## ACCO 214 Cost Accounting

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ACCO 202.

Covers elements of cost, materials, labor manufacturing expenses, including job order cost accounting, process cost accounting, and standard cost accounting. For Ferris State University transfer.

## ACCO 255 Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ACCO 211; BUSI 240; concurrent enrollment allowed in BUSI 240; and approval of chair.

This is a capstone course in which the student searches independently, with assistance from faculty within the School of Business, for a business or industry related to the program in which he/she is enrolled to complete 144 hours of a specified project or objectives. Once the student has secured a site, the student will be supervised and evaluated under the direction of a college staff member to ensure a meaningful internship experience. The student must meet with the Internship Coordinator prior to registering for this course. This is an internship and therefore requires a final grade of "C" or better.

## Agricultural Technology

## AGRI 190 Agricultural Exploration

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.

Introduces the agricultural industry from historical and contemporary perspectives. Investigates the broad range of career opportunities in agriculture in the local, regional, and global environment. Explores ethical issues in agriculture, including the environment and sustainability.

## Art

## ART 100 Introduction to Digital Art and Design

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Basic Computer Literacy.

This course provides an introduction to the computer graphics environment. The focus of this course is on digital illustration and design using Adobe Illustrator, a vector-based illustration application. Basic digital imaging techniques using Adobe Photoshop will also be introduced.

## ART 101 Two Dimensional Design

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: None.

This studio-based course focuses on visual literacy by examining the patterns of our environment and the visual systems that we utilize in our daily lives. Emphasis is placed on investigating how processes and materials may communicate about the subjects they address. Coursework consists of studio work in drawing, painting and collage as well as demonstrations, critical dialogue, and research focusing on contemporary design practices.

## ART 102 Drawing 1

4 credit hours, 6 contact hours (Lecture: 2; Lab: 4); Semesters Offered: Fall, Spring.
Prerequisite: None.

This studio-based course places emphasis on drawing from observation. Focus is placed on compositional strategies and linear perspective. Coursework consists of studio work on individual and collaborative projects as well as demonstrations and critical dialogue, all designed to offer beginning students a comprehensive orientation to drawing tools, materials, and processes.

## ART 103 Ceramics 1

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: None. Additional Cost: $\$ 28.00$.
This studio-based course offers an overview of contemporary and traditional approaches to working with clay as an expressive material. Coursework consists of a series of progressive projects, individualized instruction, and technical demonstrations. Focus is placed on construction techniques including hand-building, wheel-throwing, glazing, firing, and surface treatments, all designed to offer beginning students a holistic orientation to the materials and processes of the medium.

## ART 104 Ceramics 2

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ART 103. Additional Cost: $\$ 28.00$.
A continuation of ART 103 with increased emphasis on technical considerations of the medium and further conceptual development.

## ART 105 Photographic Design

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: None; ART 100 and ART 101 recommended.

Introductory course covering the function of both traditional (SLR- single lens reflex) and digital cameras. A strong foundation will be provided in metering, exposure, lenses, B/W film processing and printing. Emphasis is placed upon composition, creative expression aesthetics and the development of technical proficiency. A basic 35 mm SLR camera with manually adjustable aperture and shutter speed is needed for this course. A digital camera may be used with permission of the instructor.

## ART 106 Art Photography

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ART 105 or permission of appropriate Dean.

Designed for those who have a working knowledge of the photographic process (from exposure through processing the print). Advanced shooting and printing techniques as well as an introduction to other camera formats will be covered. Outside, studio flood, and strobe (flash) lighting will be discussed. In addition to learning more about what it takes to make a fine art photograph, emphasis on improving visual awareness and improved image making will be stressed.

## ART 110 Art Appreciation

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This course examines and questions artistic production in our society. Exploring a broad range of artist projects in diverse communities, environments and media, discussion topics will address and analyze shifting cultural significance, value relationships, materials and meanings of art.

## ART 120 Three Dimensional Design

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: None.

This studio-based course places emphasis on three-dimensional problem solving. Focus is placed on conceptualization and visual communication as well as investigations into the materials, methodologies, and processes of contemporary sculptural practices.

## ART 199 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture:1 to 4; Lab: 0) Semesters Available: Variable. Prerequisite: Permission of Dean.

Available courses in a studio area or a special art interest outside the regular curriculum.

## ART 200 Creative Process Through Art

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Available: Variable.
Prerequisite: None.

This course takes both lecture and studio-based approaches in exposing class members to the possibilities for personal growth through artistic production. Students are provided an orientation to many of the studios and disciplines available through the Department of Visual \& Performing Arts as well as our community-at-large. Interactive projects, demonstrations and seminars offer multiple opportunities to model the experiences that student/educators may share with their own learning community, opening further pathways for artistic investigation. This course is designed for elementary education majors as well as anyone interested in exploring creative pursuits.

## ART 203 Art History 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Surveying the development of Western Art from prehistory to the French Revolution, this course examines cultural developments through their relationships with art; exploring their processes, materials, and sites of production.

## ART 204 Art History 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Moving from the French Revolution into the modern world, this course surveys, discusses, and analyzes how artistic production actively reflects a transforming society. Tracing recurrences of aesthetic themes through time, we will explore how artists pay homage to the past while looking towards the future. What is at stake in this historical conversation?

## ART 210 Drawing 2

4 credit hours, 6 contact hours (Lecture: 2; Lab: 4); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ART 102.

Approaching a successive range of projects through observational drawing, this studio-based course encourages students to investigate what these processes and materials suggest about the subjects they capture. Continuing investigations begun in ART 102 Drawing I, projects will focus on the development of a daily studio practice, designing sequential narratives (graphic novel design-storyboarding, sequencing, layout), and an introduction to working with live models, anatomy and portraiture. Class meetings will include concentrated work on individual projects, informal discussions, technical demonstrations, and research, as students develop a cohesive portfolio of works on paper.

## ART 211 Painting 1

4 credit hours, 6 contact hours (Lecture: 2; Lab:4); Semesters Offered: Fall.
Prerequisite: None.

This studio-based course is designed for students who may be approaching oil painting for the first time as well as students with some prior experience. Progressive projects explore topics from representation to abstraction, and are designed to encourage a personal investigation of the materials. Contemporary approaches and historical context are explored.

## ART 212 Painting 2

4 credit hours, 6 contact hours (Lecture: 2; Lab: 4); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ART 211.
This course continues investigations begun in ART 211 while meeting concurrently with the introductory class. Projects in this curriculum are developed in consultation with the faculty member, and are designed to reflect the individual goals and objectives of the student pursuing a deeper exploration of oil and/or acrylic-based painting. Customized instruction and group feedback complement dedicated studio time in which students develop and present a comprehensive portfolio of works.

## ART 213 Typography in Design

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grades of C in ART 100; and ART 101, concurrent enrollment allowed.
A brief history of typography, study of type classification, letter forms and typographic principles. Students will use digital publishing software (Adobe InDesign) for text formatting and page layout.

## ART 215 Watercolor

3 credit hours, 4 contact hours (Lecture: 1; Lab: 3); Semesters Offered: Variable.
Prerequisite: None.

An introduction to the art of transparent watercolor and the distinctive characteristics of the medium. Color mixing, tools and paper characteristics are examined.

## ART 219 Graphic Design 1

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ART 213.
Covers a brief history of graphic design, basic graphic design principles, terminology and procedures. The focus is on twodimensional problem solving in the design of logos and promotional graphics. The student will work from the initial problem through design concept to finished presentation. Graphics applications introduced in the previous courses are used along with the digital imaging application, Adobe Photoshop.

## ART 220 Graphic Design 2

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ART 219.
Provides additional experience with graphic design skills, digital illustration, digital imaging, and digital publishing to solve complex graphic problems. Students will have experience with clients as the projects include designing for departments in SMC or area organizations.

## ART 225 Digital Photography

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: ART 100.
Covers the basic principles of digital photography including the technical aspects of digital cameras and photographic techniques used with digital photography. The relationship of digital photography to graphic design, publishing and photojournalism will be covered.

## ART 230 Digital Publishing

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ART 100.
Addresses the fundamentals of digital publishing. Students will gain experience in creating a variety of publications including business cards, ads, brochures, and magazine spreads (Adobe InDesign).

## ART 235 Introduction to Digital Animation

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ART 100.
This course provides an introduction to two-dimensional animation using various types of hand drawn and computergenerated processes. Basic principles such as timing and staging will be introduced. Biped and quadruped walk cycles will be covered, as well as basic lip syncing.

## ART 255 Internship

2 credit hours, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Completion of three semesters in the Graphic Design Technology A.A.S. degree program or permission of appropriate instructional Dean.

The student searches independently, with assistance from the Internship Coordinator, for a graphic design environment to complete 96 hours of on-site training. Students will learn about careers in the graphic arts field and how graphic production is dependent on the capabilities and limitations of the offset printing process. This course should be taken in the last semester of coursework to complete the Graphic Design Technology A.A.S. program. This is an internship and therefore requires a final grade of "C" or better.

## ART 261 Prepress

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ART 213; concurrent enrollment in ART 219 required.

Provides a knowledge of prepress and the basic principles of print design and production, and develops skills in their application. Students will examine and critique existing printed materials. Strong emphasis on terminology.

## ART 265 Portfolio Production

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ART 219; concurrent enrollment in ART 220 required.
This course will provide students with experience in finalizing project work that demonstrates acquired skills. Portfolios will be produced and presented in various formats, including PDF-based digital portfolios, online portfolio sites and book-based portfolios. Résumé and cover letter development will also be covered.

## ART 299 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1 to 4; Lab:0); Semesters Offered: Variable.
Prerequisite: Permission of Department Chair or Dean.
This course is designed for advanced students who have completed the majority (or all) of the available courses in an area of discipline, or have a special interest in art or visual communication beyond the regular curriculum. Coursework will emphasize conceptual development and may employ additional media specific to the projects. It is an opportunity for the student to work individually on projects that they design collaboratively with faculty supervision, exploring creative possibilities in their own direction.

## Automotive Technology

## AUTO 103 Intro to Automotive Technology

3 contact hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: $\$ 35.00$.
This is an introductory course which gives students an overview of the operating systems of the modern automobile. Students will be introduced to the tools and terminology used in the automotive industry as well the EPA, CAFE, NHTSA regulations that govern our industry. Students will learn to perform basic service and maintenance procedure. Students will also study how the automotive repair business is structured.

## AUTO 116 Brake Systems

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: $\$ 35.00$.

This is the first of two courses that teaches theory, service and repair of automotive braking systems. The course provides an overview of various hydraulic and mechanical brake systems used on today's automobiles. In the course students will learn the correct usage of brake machining equipment, precise measuring techniques, and proper procedures in a comprehensive hands-on hydraulic brakes lab environment.

## AUTO 119 Electrical 1

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: $\$ 35.00$.
This course will build a solid foundation of electrical theory and principles needed for diagnosis and repair of basic automotive systems. Material covered in this course will include Ohm's law, Kirchhoff's law, electron theory, capacitance, resistance, AC/DC voltage, magnetism, electrical test equipment and circuit design and wiring diagram usage. Basic soldering and wiring repair will be covered.

## AUTO 122 Steering and Suspension Systems

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: $\$ 35.00$.

The student will have a good understanding of the theory of operation and service of today's advanced steering and suspension systems upon completion of this course. Topics covered include steering/suspension systems diagnosis and repair, tire and wheel service, component diagnosis and replacement, and introduction to alignment settings. Noise, vibration and harshness issues are also covered in this course. Alignment theory, operation, and service procedures for passenger car, light duty truck suspension systems. Diagnosis, correction and adjustments of alignment systems are covered.

## AUTO 131 Manual Transmissions

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in AUTO 103. Additional Cost: $\$ 35.00$.
Design, theory, diagnostics, testing, and proper repair of the following systems are covered: manual transmission/transaxle assemblies and similar drivetrain components. Students will disassemble, inspect, repair and reassemble the following: manual transmissions, manual transaxles, CV joints, half shafts, transfer cases, axle assemblies, drive-shafts, and clutches. Emphasis will be given to clutch performance concerns.

## AUTO 147 Engine Repair 1

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in AUTO 103. Additional Cost: $\$ 35.00$.
This course presents engine theory and operation and studies the various engine designs utilized today. This course will focus on repair techniques for today's engines. The course will utilize precision measuring tools, specialized tools and equipment, and emphasize following prescribed procedures needed to properly repair today's modern engine.

## AUTO 148 Engine Repair 2

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in AUTO 147. Additional Cost: $\$ 35.00$.
Using comprehensive hands-on lab work, correct usage of engine machining equipment, precise measuring techniques, and diagnostic procedures students will disassemble, inspect, repair, and reassemble an automotive internal combustion engine. Emphasis will be given to performing engine machining procedures required for a proper engine overhaul; from valve resurfacing to cylinder boring and restoration. Additional topics covered include hybrid and alternative fuel technology.

## AUTO 216 Heating and Air Conditioning

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in AUTO 103. Additional Cost: $\$ 35.00$.

This class covers theory, operation, diagnostics, and repair of car/light truck heating and cooling systems. Topics include: R134a and future refrigerants, reclaiming and recycling of these refrigerants. Engine cooling and cabin heating component operation is also covered. Proper service procedures and component replacement is covered in detail. Electrical system component operation, sensors and blower motor controls are discussed.

## AUTO 222 Electrical 2

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in AUTO 103 and AUTO 119. Additional Cost: $\$ 35.00$.

This course will cover battery, starting and charging system, chassis lighting, dash and electrical circuits design and function. Testing and diagnosis skills using meters, test equipment and diagnostic tools will be covered. Hands on component removal/replacement and wiring harness repair procedures will be covered.

## AUTO 223 Electrical 3

3 credit hours, 4 contact hours (Lecture: 2: Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in AUTO 222. Additional Cost: $\$ 35.00$.

This course is an in-depth study of the theory, diagnosis, and repair of chassis electrical and electronic systems, including the study of electronic dash circuits, security systems, inflatable restraint systems, electronic cruise control and multiplex body electrical systems. The student will be utilizing diagnostic scan tools and advanced lab scope techniques. Module circuit designs, programing procedures and usage is discussed.

## AUTO 227 Engine Performance 1

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in AUTO 103 and AUTO 119. Additional Cost: $\$ 35.00$.

The student will be provided with a basic understanding of the theory and operation of the fuel metering and emission devices found on past and present automobiles and light trucks and how they relate to engine performance. Practical experience will be gained through diagnosing, testing, and servicing the various systems found on these vehicles. Various ignition system designs will also be covered.

## AUTO 228 Engine Performance 2

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in AUTO 227. Additional Cost: $\$ 35.00$.
The student will expand on the knowledge gained in Auto Engine Performance Systems 1 course and apply the theories to the more advanced systems found on current vehicles. Systems covered include computer controlled ignition and fuel systems, distributorless ignition, coil-on-plug ignitions, throttle body and port fuel injection, OBD II systems, Mode $\$ 06$ and other emissions related component systems. Diagnosis includes using scan tools, digital meters and test equipment.

## AUTO 229 Engine Performance 3

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in AUTO 228. Additional Cost: $\$ 35.00$.

Additional study of automotive advanced fuel and engine systems of modern automobile systems. Direct injection, alternate fuels and advanced mechanical engine control systems will be discussed. Advanced testing of components and systems using lab scopes, pressure transducers and electrical test equipment will be utilized extensively to identify intermittent and difficult drive-ability concerns.

## AUTO 232 Advanced Brakes and Chassis Systems

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in AUTO 103, AUTO 116, AUTO 119, and AUTO 122. Additional Cost: $\$ 35.00$.
This class is an advanced brakes, steering and chassis systems electrical/electronic component class covering ABS (Anti-lock Braking Systems) components, electronic suspension system components including ride control and stability systems, electronic steering assist systems, traction control systems and other modern systems including collision alert and accident avoidance systems. Component operation, diagnosis and testing and replacement will be performed and discussed.

## AUTO 234 Automatic Transmissions

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in AUTO 103. Additional Cost: $\$ 35.00$.

This course guides the student from basic transmission design, through hydraulic operations, including electronic controls as they relate to transmission performance. Theory, construction, diagnosis, and proper repair of automatic transmissions are extensively covered. Students will use transmission test equipment and diagnostic charts to diagnose, disassemble, repair, and reassemble an automatic transmission and a transaxle assembly.

## AUTO 246 Alternative Fuel and Hybrid Electric Vehicles

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in AUTO 222. Additional Cost: $\$ 35.00$.

This course guides the student from basic carbon-based fuels and alternative fuels, through hybrid vehicle operations, including electronic controls as they relate to hybrid performance. Theory, construction, diagnosis, and proper repair techniques of hybrid vehicle systems are extensively covered. Students will use proper test equipment and diagnostic and repair a hybrid vehicle.

## AUTO 255 Internship

5 credit hours, 5 contact hours (Lecture: 0; Lab: 5); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Completion of all AUTO Certificate Program courses, with a minimum grade of $C$, and recommendation of the program advisor.

This is a capstone course in which the student searches independently with assistance from the School of Advanced Technology Faculty, for a business or industry related to the program in which he/she is enrolled to complete 240 hours of a specified project or objectives. The student will be placed, supervised, and evaluated under the direction of a college staff member to insure a meaningful internship experience. The student must meet with the Internship Coordinator prior to registering for this course. This is an internship and therefore requires a final grade of "C" or better.

## Potawatomi Language

## BDWI 101 Introductory Potawatomi Language

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: None.
Introduction to Bowéwadmimwen, the Potawatomi Language, covering the basics of pronunciation, grammar, and spelling, as well as the language's role in the culture of the Potawatomi people. The basics of verb construction and sentence construction will be addressed. Instruction will address both speaking and writing the language. Materials from the Wisconsin and Kansas Potawatomi communities will be utilized, as well as materials representing the local Pokagon Band Potawatomi dialect.

## BDWI 201 Intermediate Potawatomi Language

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in BDWI 101.
Continuation of introductory Bowéwadmimwen, the Potawatomi Language, covering more advanced aspects of pronunciation, grammar, and spelling, as well as the language's role in the culture of the Potawatomi people. Instruction will address both speaking and writing the language. Materials from the Wisconsin and Kansas Potawatomi communities will be utilized, as well as materials representing the local Pokagon Band Potawatomi dialect.

## Biology

## BIOL 098 Cell Biology for Health Careers

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Fall, Spring, Summer. Prerequisite: None.

An introduction to the fundamental biological concepts of cell structural organization and function, including energy metabolism, protein synthesis and genetics. This course will not count toward graduation requirements.

## BIOL 101 General Biology 1

5 credit hours, 7 contact hours (Lecture: 4; Lab: 3); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in CHEM 100, or one year of high school chemistry with minimum grade of B taken within the last 5 years, or satisfactory test score; ENGL 115 or satisfactory test score, concurrent enrollment in ENGL 115 allowed.

Explores the principles of molecular and cellular biology, genetics and evolution. Includes the scientific process; chemical principles and biological molecules; cell structure, metabolism, and reproduction; Mendelian, chromosomal, and molecular genetics and genome organization. This course considers the development and mechanisms of evolutionary theory. Laboratory emphasizes development of lab skills, biological techniques, and instrumentation used in biology.

## BIOL 102 General Biology 2

5 credit hours, 7 contact hours (Lecture: 4; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in BIOL 101.

This course explores biodiversity, plant and animal form and function and the principles of ecology. It surveys the unity and diversity of life forms such as bacteria, protists, fungi, nonvascular and vascular plants, and invertebrate and vertebrate animals from an evolutionary perspective; examines details of plant and animal anatomy and physiology in relation to their phylogenies; and introduces principles of and interactions among populations, communities, and the environment. Laboratory reinforces principles of organismal biology and ecology.

## BIOL 110 Human Biology

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Introduces basic normal anatomy and physiological processes of humans. Emphasizes functional mechanisms of cells, tissues, organs, organ systems, and their interactions. Laboratory experience includes observation of anatomic models and specimens and participation in activities designed to illustrate physiologic concepts.

## BIOL 118 Plant Biology

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Introduces plants as the model organism for learning about basic biological principles including cell biology, genetics, plant development, anatomy, and ecology. Students work throughout the semester as individuals and as members of collaborative working groups to answer questions, solve problems, develop questions, perform experiments, and conduct research.

## BIOL 202 Microbiology

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in CHEM 100, or one year of high school chemistry with minimum grade of B taken within the last 5 years, or satisfactory test score; minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment in ENGL 115 allowed.

Explores fundamentals of microbial structure, nutrition, metabolism, reproduction, and genetics. Considers the role of microbes in medicine and host defense mechanisms. Laboratory exercises develop skills in culture, identification, and control of microbes.

## BIOL 214 Basic Human Anatomy

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in BIOL 098, BIOL 101, BIOL 110, BIOL 202, BISC 111, or one year of high school biology with minimum grade of $B$ taken within the last 5 years, or satisfactory test score.

A study of the anatomical structures of the human body, including tissues, organs, and organ systems and their relationship to function. Laboratory experience provides observation and identification of mammalian structures. Dissection of preserved specimens is a lab requirement.

## BIOL 215 Principles of Human Physiology

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in BIOL 214; minimum grade of C in CHEM 100, or one year of high school chemistry with minimum grade of $B$ taken within the last 5 years, or satisfactory test score.

Provides a study of the normal physiological processes of humans with emphasis on the functional mechanisms of cells, tissues, organs, and systems and their interactions. Laboratory experience provides direct observation and participation in the physiological processes of humans.

## Biological Sciences

## BISC 111 Biological Science

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: None.
Provides a laboratory course in biological concepts for the liberal arts curriculum. Includes an overview of basic chemistry, cellular form and function, genetic inheritance, molecular genetics, biodiversity, evolution, and ecology.

## Business

## BUSI 200 Small Business Management

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This is an introductory course which focuses on creating and maintaining a sustainable competitive advantage with a small business. It gives the students the opportunity to think through and develop their small business idea and dream-with a focus on management of that business.

## BUSI 201 Principles of Management

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer-Alternate Years.
Prerequisite: Minimum grade of C in BUSI 200.
In Principles of Management, students will learn how businesses accomplish their business objectives, including how they organize the company to be efficient and effective, how they lead and motivate employees, and how to put controls in place to make sure plans are followed and goals are met.

## BUSI 207 Business Law 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer-Alternate Years. Prerequisite: BUSI 200 recommended.

In Business Law 1, students gain an understanding of business law as it relates to them currently and in their professional future. Included in the material is a review of the evolution of business law at the federal, state and local levels. The course will include an introduction of the court system at the local, state, and national levels and a discussion of the substantive and procedural differences between civil and criminal law. Students will learn about contract law and the law of sales.

## BUSI 208 Business Law 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer-Alternate Years. Prerequisite: BUSI 200 and BUSI 207 recommended.

Business Law 2 continues a discussion of basic principles of civil law from Business Law I. An emphasis is placed on gaining an understanding of the law relating to business structures, the law of commercial paper, the law of security agreements and bankruptcy. The course emphasizes the practical aspect of these legal theories by having students applying them through the use of case studies of actual law suits which framed and clarified the application of those legal principles.

## BUSI 210 Personal Finance

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer-Alternate Years.
Prerequisite: None.
Personal finance is the study of the process known as financial planning. Students will learn practical steps to take to evaluate where they are financially today, how to set and meet financial goals, and how to control their finances as opposed to having finances control them. Topics covered include the use of financial services, purchasing insurance, automobiles, homes and other major items, taxation, and planning for the future including career choices, family choices, and retirement.

## BUSI 212 Supervision

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall of even years.
Prerequisite: Minimum grade of C in BUSI 200.

A study of the supervisor's job including: assigning work, decision making, the basics of motivating employees at work, leadership styles, cost control, training employees, communications as a management tool, unions, the supervisor, and the law.

## BUSI 214 Business Communications

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in BUSI 200 and ENGL 103 or ENGL 103W.

This course introduces students to the principles and methodology used in effective communication within and between business organizations. Methodology includes researching, composing, evaluating and presenting verbal and written communication and the appropriate use of either or both in given situations.

## BUSI 220 Marketing

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer-Alternate Years.
Prerequisite: Minimum grade of C in BUSI 200 or permission of appropriate Dean. BUSI 214 recommended.
Provides an understanding and interpretation of the marketing system and its importance in the economy. Functions, institutions and problems of marketing are examined from the viewpoint of the customer.

## BUSI 221 Advertising

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring of even years.
Prerequisite: Minimum grade of C in BUSI 200 or permission of appropriate Dean. BUSI 214 recommended.

A study of the procedures, techniques, purposes and media of advertising. Special attention is given to the creation of advertising ideas, market research, and the use of media as tools in solving the problems of sales promotion.

## BUSI 225 Human Resource Management

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer-Alternate Years.
Prerequisite: Minimum grade of C in BUSI 200.
An overview of personnel relationships in a business environment, including: a study of personnel systems, staffing and organization, developing human resources, the working environment, management-labor relations, remuneration, and security and career assessment.

## BUSI 240 Professionalism Workshop

1 credit hour, 1 contact hour (Lecture: 1; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: None. Strongly recommended to be taken at the end of a student's program to derive the most value from the course.

Workshop designed to provide professional "polish" for the student. Discussions will include, but are not limited to, employability and job retention skills, professionalism, ethical behavior, and personal habits.

## BUSI 255 Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in BUSI 240, concurrent enrollment allowed; and permission of chair.
This is a capstone course in which the student searches independently, with assistance from faculty within the School of Business, for a business or industry related to the program in which he/she is enrolled to complete 144 hours of a specified project or objectives. Once the student has secured a site, the student will be supervised and evaluated under the direction of a college staff member to insure a meaningful internship experience. The student must meet with the Internship Coordinator prior to registering for this course. This is an internship and therefore requires a final grade of " $\mathbf{C}$ " or better.

## Computer Aided Drafting \& Design

## CADD 101 Introduction to CAD/Auto CAD

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.
An introduction to the principles of computer aided design using AutoCAD software. This course covers the creation and modification of two-dimensional geometry, dimensioning, print creation and drawing management. Three dimensional concepts will be introduced.

## Chemistry

## CHEM 100 Fundamentals of Chemistry

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring, Summer. Prerequisite: Minimum grade of C in MATH 101, MATH 102, or satisfactory test score, concurrent enrollment allowed; minimum grade of C in ENGL 115 or satisfactory test score, concurrent enrollment allowed.

Provides a basic overview of chemical principles for students with little or no background in chemistry. Includes fundamentals of general chemistry, organic chemistry, and biochemistry.

## CHEM 101 General Chemistry 1

5 credit hours, 7 contact hours (Lecture: 4; Lab: 3); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MATH 127 or test score, concurrent enrollment allowed; minimum grade of C in CHEM 100 , or one year of high school chemistry with minimum grade of $B$ taken within the last 5 years, or satisfactory test score; minimum grade of C in ENGL 115, or satisfactory test score; concurrent enrollment in ENGL 115 allowed.

Measurements, atomic structure, ions and nomenclature, chemical equations, equation and solution stoichiometry, thermochemistry, the gaseous state, quantum mechanics, periodic trends, and chemical bonding. Laboratory experiments illustrate key concepts and employ quantitative measurements and calculations.

## CHEM 102 General Chemistry 2

5 credit hours, 7 contact hours (Lecture: 4; Lab: 3); Semesters Offered: Spring, Summer.
Prerequisite: Minimum grade of C in CHEM 101 and MATH 127 or satisfactory test score.

Second course in a two-semester sequence in general college chemistry. Includes the study of molecular structure, solid and liquid states, solutions, equilibrium, solubility product principle, acid-base theory, kinetics, redox reactions, and electrochemistry. Laboratory experiments illustrate key concepts and employ quantitative measurements and calculations.

## CHEM 201 Organic Chemistry 1

5 credit hours, 7 contact hours (Lecture: 4; Lab: 3); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in CHEM 102.
First course in a two-semester sequence in elementary organic chemistry. Investigates the structure, nomenclature, and properties (physical, chemical, spectral, and stereochemical) of aliphatic hydrocarbons and alkyl halides. Explores the chemical reactions of these compounds along with their associated mechanisms, kinetics, and stereochemistry.

## CHEM 202 Organic Chemistry 2

5 credit hours, 7 contact hours (Lecture: 4; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in CHEM 201.
Second course in a two-semester sequence in elementary organic chemistry. Investigates the structure, nomenclature, and properties (physical, chemical, spectral, and stereochemical) of aromatic hydrocarbons, alcohols, ethers, carboxylic acids and derivatives, aldehydes and ketones, amines, heterocyclic compounds, and selected biochemical compounds. Explores the chemical reactions of these organic compounds along with their associated mechanisms, kinetics, and stereochemistry.

## Communications

## COMM 110 Introduction to Mass Communication

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring-of even years.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W, concurrent enrollment allowed.

An introduction to the history, structure and issues facing major media channels like television, newspaper, radio, and the Internet. Includes communication theory and practice. Designed for students who intend to enter the communication field, and for those who want a broad overview.

## COMM 115 Writing for Mass Media

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring of odd years.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W, concurrent enrollment allowed.

Development of writing skills for mass media, including print and broadcast journalism and public relations. Emphasis is on developing news judgment, gathering information, using correct news style and structure, and effectively presenting material for print and electronic news media.

## Construction Trades

## CONS 114 Intermediate Construction Practices

8 credit hours, 10 contact hours (Lecture: 6; Lab: 4); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed. Additional Cost: \$150.00.

This course introduces students to the fundamentals of construction including tools \& safety, foundations, framing, roofing, insulation, and wall layouts. Students will learn how to lay out a foundation, frame house walls and set engineered trusses. This course will concentrate on Green Building techniques and processes utilized to accomplish these parts of the total construction process.

## CONS 115 Construction Math

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MATH 098 or satisfactory test score.

This course stresses the use of formulas and mathematics techniques that are used in practical field applications including project set-up, material estimating and ordering, and efficient inventory management and material utilization.

## CONS 117 Print Reading for Construction Trades

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall.
Prerequisite: None.

Instruction and practice in methods commonly used to communicate technical ideas through the use of construction prints are emphasized. Students will develop skill in reading and interpreting construction print drawings. Instruments are used to make orthographic drawings that accurately describe design and size, including sketching multi-view, sectional views, auxiliary views and detail drawings of residential buildings.

## CONS 130 Interior and Exterior Finishes

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: None. Additional Cost: $\$ 57.00$.

This course is designed to provide students with knowledge of the terminology, components, and skills needed for the application of various types of interior and exterior finishing. Installation practices and material selection for: drywall, paint, interior and exterior doors and trim, floor coverings, cabinets, siding and windows will be covered.

## CONS 135 Electrical and Mechanical Systems

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: None. Additional Cost: $\$ 57.00$.

This course will provide an introduction to the electrical, plumbing and HVAC systems used in residential buildings. Emphasis will be placed on the advantages and disadvantages of various systems, including Green Building methods as they apply.

## CONS 140 Quantity and Cost Estimating

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 110.

This course will introduce students to the elements involved in the preparation of the contractor's bid proposal. Quantity takeoff, crew sizes, daily outputs, unit costs and organization of the bid packages into general contracted and subcontracted work. The development of unit prices for estimating labor, material and equipment unit price development, productivity adjustment factors, overhead and profit, cash flow and interest calculations, conceptual estimating methods, and cost variance analysis.

## CONS 145 Administration and Scheduling

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: None.

This course will introduce students to field documentation and report development, including a project logic network, schedule, field reports, contract documents, contract change orders, subcontract agreements, purchase orders, field planning, filing system, ledgers and cost control reports. The student will learn how to utilize various planning methods, procure materials, complete a subcontract agreement, maintain field records and develop progress reports. During this course students will utilize various software packages to learn about advanced construction planning and scheduling techniques, based on the critical path method, including work breakdown, crew analysis and productivity, activity time-cost relationships, project time-cost relationships, resource leveling, overlapping activity relationships and lag, and project cash flow.

## CONS 150 Solar Energy Technology

1 credit hour, 1 contact hour (Lecture: 1; Lab: 0); Semesters Offered: Spring.
Prerequisite: None.

This course covers installation and mounting methods of solar photo voltaic panels, energy output calculations, overview of electrical hardware requirements, and connections to electrical systems.

## CONS 161 REScheck Building Energy Codes

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 110, concurrent enrollment allowed.

This course focuses on the proper use and understanding of the U.S. Department of Energy's REScheck Energy Compliance Software to meet current Residential Energy Compliance requirements. Through theory and hands on exercises the student will use the REScheck software to determine energy compliance of new residential structures based on current energy conservation codes and local requirements using a variety of residential building plans. Required knowledge of residential building specifications and mathematics for proper REScheck software utilization will be covered. This course prepares the student to take the U.S. Department of Energy REScheck certification exams. The Michigan Unified Energy Code (MUEC) and International Energy Conservation Code (IECC) will also be discussed, as well as the history of the Michigan Energy Code and the U.S. Department of Energy.

## CONS 165 Building Analyst/Envelope

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall.
Prerequisite: None.

This course provides instruction in the analytical review of energy use and conservation in residential construction. Topics will be covered from a building science perspective, and include thermodynamics, heat transfer, heating systems, moisture, and humidity impact. Also covered are ventilation for air flow and health, thermal and pressure envelopes, R-Values and U-Values, building calculations, safety and health, and energy conservation. Students will learn to optimize the installation, operation, maintenance, and performance of building envelope systems. It also addresses their interaction with other building systems, and covers problems related to the building envelope such as moisture, ice dams, mildew and drafts.

## CONS 169 Green Professional

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Spring.
Prerequisite: None. Additional Cost: $\$ 150.00$.
This course instructs students on the benefits that green homes provide in terms of lower energy costs and long-term value. Strategies for incorporating green-building principles into homes while minimizing added cost of construction will be covered. Small business practices and management including the principals of planning, organizing, staffing/directing and controlling will also be covered. This course prepares students to take the Certified Green Professional Certificate exam.

## CONS 180 Design and Planning

5 credit hours, 8 contact hours (Lecture: 2; Lab: 6); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in CADD 101.
This course will examine residential exterior styles and interior space planning for use and flow. It will also review design cost impacts, value engineering and affordable construction techniques, the use of materials that are environmentally sustainable and sound, and the utilization of green construction methods. This course also provides students with the opportunity to apply their experiences and develop a set of residential building permit plans in a CAD environment which will include site layout, floor plan, elevation views, and construction details. Community development and infrastructure considerations will be introduced.

## CONS 255 Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of $C$ in all first semester Construction Trades Technology courses.

This is a capstone course in which the student searches independently, with assistance from the School of Advanced Technology faculty, for a business or industry related to the program in which he/she is enrolled to complete 144 hours per credit of a specified project or objectives. The student will be placed, supervised, and evaluated under the direction of a college staff member to insure a meaningful internship experience. The student is asked to meet with the Internship Coordinator prior to registering for this course. This is an internship and therefore requires a final grade of "C" or better.

## Criminal Justice

## CRIM 102 Serial Killer

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This course examines the extent, causes, and social characteristics of serial killers. After examining general criminological theories and the characteristics of murders, the course will investigate the popular images about serial killers, the motivations of these offenders, the distribution of their crimes over time and across geographical areas, elements surrounding these offenses, and the offenders' methods of selecting victims. The topics of homicide investigation techniques, crime profiling, and the criminal prosecution of serial killers will also be covered in the course. Video Material, case studies, and results from current research will provide a comprehensive investigation of these extreme and rare forms of criminal behavior.

## CRIM 110 Introduction to Criminal Justice

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This course will provide an overview of the criminal justice system in the United States. It will examine the various components (police, courts, \& corrections) of the criminal justice system and provide a perspective on how they are linked and operate. The course will also cover the historical and contemporary issues that challenge and confront these component organizations.

## CRIM 111 Introduction to Corrections

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This course will provide an overview of the correctional system in the United States. It will explore the history of punishment and provide insight into community corrections and institutional corrections. This course will also examine the prison world and the issues faced in corrections today.

## CRIM 112 Introduction to United States Legal Systems

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

This course shall explore the historical development, power/jurisdictions and current issues pertaining to the courts in the United States. Further, this course will analyze the effectiveness of traditional techniques used by the courts, prosecution and defense in the judiciary processes at both the state and federal levels.

## CRIM 113 Introduction to Law Enforcement

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This course shall explore the historical development, power/jurisdictions and current issues pertaining to law enforcement in the United States. Further, this course will analyze the effectiveness of traditional and non-traditional techniques of law enforcements control of crime in urban and rural settings from a state and federal level.

## CRIM 219 Conflict Management in Corrections

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Examines the dynamics involved when dealing with the public and inmates. An in-depth analysis will be conducted of the following: culture and minorities, formation of attitudes and prejudices, understanding human relations, conflict intervention, special needs inmates, domestic situations and suicide. This course meets M.C.O.T.C. certification requirements.

## CRIM 220 Supervision and Management in Criminal Justice

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

A study of administration and management of police organizations, including the courts, police and corrections.

## CRIM 235 Legal Issues in Corrections

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
The study of Constitutional law as it pertains to the functions, operations, and responsibilities of people involved in the field of corrections, including probation and parole. Course covers the court process in the American legal system, prisoners' rights, and tort law as it pertains to corrections, and an examination of pertinent case law. The decision-making process within the field of corrections and the legal system is also examined. This course meets the M.C.O.T.C. certification requirements.

## CRIM 260 Delinquency, Prevention, and Control

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

This course is a study of juvenile delinquency theories of causation and current prevention programs. It will explore the nature and extent of delinquency and examine suspected causes of delinquent behavior. It will also cover critical issues in juvenile delinquency and examine crucial policies and programs in the Criminal Justice system that address juvenile delinquency.

## CRIM 270 Correctional Institutions

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Examines federal, state, county and local correctional facilities. Topical issues include: the purpose of correctional institutions, historical and philosophical developments, management and organizational principles, security operations, treatment issues, classification issues, analysis of women's facilities, types of institutions and the role of staff. This course meets M.C.O.T.C. certification requirements.

## CRIM 275 Correctional Clients

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Examines the human behavior process. Topics includes: impact of the environment and psychological influences on behavior, criminal behavior and lifestyles, the role of substance abuse and behavior, the role of the family on behavior, personality development, emotional, social and psychotic disorders and treatment alternatives. This course meets M.C.O.T.C. certification requirements.

## Economics

## ECON 201 Macroeconomics

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 101 or MATH 102 or satisfactory test score; concurrent enrollment in ECON 202 not recommended.

Taking ECON 202 before ECON 201 is recommended.
This course is an introduction to macroeconomic study or the causes of economic behavior at the level of national economic activity, why this level changes over time, and government spending, taxing, and monetary policies which retard or promote economic performance. Further, macroeconomic study looks at the problems of unemployment, inflation/deflation, and other challenges to economic growth on a national level. Students will gain an understanding of concepts and methodology used in macroeconomic analysis, and the necessary conditions for efficiency in free market production and exchange.

## ECON 202 Microeconomics

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer. Prerequisite: Minimum grade of C in MATH 101 or MATH 102 or satisfactory test score; concurrent enrollment in ECON 201 not recommended.

Taking ECON 202 before ECON 201 is recommended.
This course is an introduction to microeconomic study or the study of how individuals and individual firms make decisions about the use of scarce resources for unlimited needs and wants. Microeconomic study also looks at the ways that individuals, firms and the public sector interact in the overall allocation of society's resources. Students will gain knowledge of concepts, methodology used in microeconomic analysis and the necessary conditions for efficiency in free market production and exchange. Further, the student will acquire the ability to follow arguments concerning microeconomic theory to select societal problems; ability to follow arguments concerning microeconomic theory, and to distinguish between sound and fallacious reasoning.

## Education

## EDUC 101 Introduction to the Profession of Teaching

1 credit hour, 1 contact hour (Lecture:1; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

This course is an introduction to the study and profession of education. Topics include: ethics, MTCC preparation, professional culture, conceptual framework, dispositions, certification pathways and digital portfolios.

## EDUC 115 Introduction to Early Childhood Education

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
An orientation to observation skills, basic developmental areas, child guidance, and the creation of appropriate environments for students in the field of early childhood education. This course includes field experience with young children.

## EDUC 120 Educational Exploration and Planning

1 credit hour, 1 contact hour (Lecture: 1; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Emphasis is on establishing one's own academic and career goals and using those to make a clear Educational Development Plan. Develops the skills and confidence necessary to navigate the various administrative offices and services associated with college.

## EDUC 208 Infant/Toddler Care

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in EDUC 115.

This course focuses on the physical, social, emotional, cognitive, and language development of the child from birth to age two. It includes methods for providing care-giving routines, designing developmentally appropriate curriculum, managing schedules and routines, record-keeping, and establishing relationships between the center, home, and family. This course includes participation in an approved infant/toddler setting weekly.

## EDUC 210 Diversity in Early Childhood

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in EDUC 115.

This course explores diversity in culture, traditions, gender, the development of children, and identifying children with disabilities. Topics covered include special needs children, multicultural education, family support, and gender bias. Discussion will include strategies for early intervention, the importance of families in the education of the child, anti-bias curriculum, appropriate assessment and community services.

## EDUC 215 Human Development and Learning

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in PSYC 101.

A study of human development from birth to death. Special attention is devoted to the factors which affect an individual's physical, social-emotional, and intellectual development.

## EDUC 217 Early Childhood Development

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in EDUC 115.

Targets physical/motor, socio-emotional, cognitive and language development of children from conception through age eight. There will be a focus on the importance of observation, impact of family relationships, developmental milestones, individual diversity, appropriate environments and strategies to enhance development. Students are expected to observe and record the behaviors of young children.

## EDUC 220 Guiding Children's Social Development

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in EDUC 115.
Assists students in applying developmental principals to young children's social development. There is a focus on specific strategies and procedures that will enhance growth of internal self-control. These skills include: learning how to listen and talk with young children, methods for effective discipline, and increasing children's ability to make choices. Regular observation of young children is required.

## EDUC 221 Early Childhood Curriculum/Cognitive and Communication

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in EDUC 115.

Emphasizing the planning and implementation of developmentally appropriate materials and activities in cognitive and language areas. Students will become knowledgeable of basic skills, developmental sequence and concepts for promoting children's problem solving and communicative abilities. Each student will be responsible for interacting with young children through planned activities, which will be the focus of this course.

## EDUC 222 Early Childhood Curriculum/Physical and Creative

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in EDUC 115.
Emphasizing the planning and implementation of developmentally appropriate materials and activities in the physical and creative (music, art, and drama) areas will be the focus. Students will become knowledgeable of basic skills, developmental sequence, and concepts for promoting children's motor abilities and creative process. Each student will be responsible for interacting with young children with planned activities.

## EDUC 230 Administration of Early Childhood Programs

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in EDUC 115.
This course addresses the roles and responsibilities associated with operating a quality early childhood program, including the knowledge and skills necessary to be a successful program director. Topics include developing a program philosophy, handbook, and budget, choosing a site, designing an environment, staff hiring and supervision, curriculum planning, standards of quality, health, safety, and nutrition, staff development, teamwork and leadership, and relationships with parents.

## EDUC 240 Early Childhood Education Internship

4 to 8 credit hours, 4 to 8 contact hours (Lecture: 0; Lab: 4 to 8); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Permission of appropriate Dean.
This is a course in which the student searches independently, with assistance from the Lead Faculty of Early Childhood Education, for a placement site related to the Early Childhood Education program to complete 192-384 hours of a specified project or objectives. The student will be placed, supervised, and evaluated under the direction of a college staff member to insure a meaningful internship experience. The student is asked to meet with the Lead Faculty of Early Childhood Education prior to registering for this course. This is an internship and therefore requires a final grade of " $\mathbf{C}$ " or better.

## EDUC 255 Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Permission of program advisor.
This is a capstone course in which the student searches independently, with assistance from the Internship Coordinator, for a business or industry related to the program in which he/she is enrolled to complete 144 hours of a specific project or objectives. The student will be placed, supervised, and evaluated under the direction of a college staff member to insure a meaningful internship experience. The student is asked to meet with Internship Coordinator prior to registering for this course. This is an internship and therefore requires a final grade of " $C$ " or better.

## EDUC 260 Emergent Literacy

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in EDUC 115.
This course will broaden students' knowledge of the theoretical base, as well as instructional strategies to enhance literacy practices of children ages 0-8. The course will cover developing literacy by emphasizing practices which engage children in integrated, meaningful and functional activities.

## Robotics

## ELEC 118 Fundamentals of Electricity 1

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of $C$ in MATH 101 or satisfactory test score, concurrent enrollment allowed; minimum grade of $C$ in ENGL 115 or satisfactory test score, concurrent enrollment allowed; concurrent enrollment in ELEC 119 required.

Students will learn how electricity is safely generated, distributed, and consumed, and how to safely install and maintain electrical circuits having resistive loads. Students will also learn series and parallel resistive circuits. Activities will include basic tools, instruments, and calculations needed for on-the-job use. The National Electrical Code will be introduced.

## ELEC 119 Fundamentals of Electricity 2

4 credit hours, 4 contact hours (Lecture: 4: Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ELEC 118, concurrent enrollment allowed; MATH 101 or satisfactory test score, concurrent enrollment allowed; minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Students will learn how series and parallel RL, RC, LC and RLC circuits are used and how AC is generated, distributed and consumed. Tools, instruments and calculations will be used to safely install and maintain circuits that have inductive and capacitive reactive loads. The National Electrical Code will be used.

## ELEC 131 Digital Electronics

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring. Prerequisite: Minimum grade of C in ELEC 118 and ELEC 119; MATH 101 or satisfactory test score; minimum grade of $C$ in ENGL 115 or satisfactory test score, concurrent enrollment allowed.

This course is an introductory course covering the use of digital electrical logic concepts. Students will construct virtual circuits, test and troubleshoot digital circuits by observing and interpreting digital codes and numbers. Topics covered but not limited to weighted numbering systems, math functions and sequential logic.

## ELEC 140 Motor and Motor Control Circuits

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grades of C in ELEC 118 and ELEC 119, concurrent enrollments allowed; MATH 101 or satisfactory test score, concurrent enrollment allowed; minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment in ENGL 115 allowed.

The student will learn to construct and build relay ladder diagrams, install typical motor control circuits in conformance with the National Electrical Code and the use of standard diagrams and wiring plans. Troubleshooting of circuits will be emphasized to allow students to develop critical thinking skills.

## ELEC 208 Electronic Communications

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ELEC 119; MATH 127 or satisfactory test score; minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment in ENGL 115 allowed.

This course covers electronic communications techniques and systems having wide application in business and industry. Topics will include oscillators, modulators, demodulators, high frequency amplifiers, transmission lines, fiber optics and lasers.

## ELEC 212 Microprocessors

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grades of C in ELEC 131; MATH 127 or satisfactory test score; minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment in ENGL 115 allowed.

This course provides foundational understanding of computers and industrial controls. Topics include basic operation, memory considerations, connecting peripherals, using an assembler, using a ROM programmer, programming on-chip timers, counters, serial and parallel I/O, and programming interrupts.

## ELEC 218 Process Control Instrumentation 1

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grades of C in ELEC 118; ELEC 119; MATH 101 or satisfactory test score; minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment in ENGL 115 allowed.

This course is designed to study solid state devices such as transistors, diodes, and amplifiers, in addition to the operation and maintenance of sensors, transducers, controllers, and final control elements. Principles and practices relating to many kinds of devices used to control temperature, pressure, flow, level, and motion will be studied.

## ELEC 233 Programmable Logic Controllers

2 credit hours, 4 contact hours (Lecture: 1; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grades of C in ELEC 118; ELEC 119; MATH 101 or satisfactory test score; minimum grade of C in ENGL 115 or satisfactory test; concurrent enrollment in ENGL 115 allowed.

This course covers the installation, programming and management of programmable logic controllers (PLC), human machine interfaces (HMI), and motion control. PLC ladder logic utilizing both discrete and analog I/O are covered. Hands-on training focuses on Allen-Bradley devices and Rockwell software.

## ELEC 234 Advanced PLC and Motion Control

2 credit hours, 4 contact hours (Lecture: 1; Lab: 3); Semesters Offered: Fall.
Prerequisite: Minimum grades of C in ELEC 233; MATH 127 or satisfactory test score, concurrent enrollment allowed.

This course covers programming of PID loop, motion control, sensor utilization and open and closed loop control. Also covered are the safe operation and maintenance of sensors, transducers, controllers, and final control elements and other devices used to control industrial processes. Principles and practices relating to many kinds of devices used to control temperature, pressure, flow, level, force and motion will be studied. Hands-on training focuses on Allen-Bradley devices and Rockwell software. There is also an emphasis on troubleshooting PLC programs.

## ELEC 255 Internship

2 credit hours, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Variable.
Prerequisite: Completion of all Robotics Certificate Program courses with a minimum grade of $C$ and recommendation of the program advisor.

This is a capstone course in which the student searches independently, with assistance from the Internship Coordinator, for a business or industry related to the program in which he/she is enrolled to complete 48 hours per credit of a specified project or objectives. The student will be placed, supervised, and evaluated under the direction of a college staff member to insure a meaningful internship experience. The student must meet with the Internship Coordinator prior to registering for this course. This is an internship and therefore requires a final grade of " $\mathbf{C}$ " or better.

## English

## ENGL 103W Freshman English 2 with Workshop

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Provides instruction in the writing of expository prose. Varied writing strategies are presented for use in the planning and developing of essays. The course includes an introduction to documentation and research procedures. Supplemental instruction in support of reading, writing, and research skills is provided through specialized workshops which meet in addition to the basic ENGL 103 class.

## ENGL 103 Freshman English 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Provides instruction in the writing of expository prose. Varied writing strategies are presented for use in the planning and developing of essays. The course includes an introduction to documentation and research procedures.

## ENGL 104 Freshman English 3

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103 W .

Extends and elaborates the expository prose strategies introduced in English 103. The writing assignments are analytic and/or argumentative in nature. Readings in varied genres are provided to build critical reading and thinking skills. A formal research paper is assigned.

## ENGL 115 Critical Reading and Writing

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: None. Additional cost: $\$ 5.00$.

Uses content-based approach to teach students how to effectively read and study textbooks/e-books and effectively prepare for exams typical of college courses as well as cover basic techniques of composition emphasizing the building of writing skills necessary to succeed in college level courses. Includes techniques for critical thinking and evaluating arguments. Reviews basic sentence structure, grammar and editing, plus instruction and practice in essay development and organization.

## ENGL 199 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1-4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Permission of Department Chairperson or Dean.

This course is for students who have completed all available courses in this subject area or who have a special interest in this subject area outside of the regular curriculum.

## ENGL 228 Proposal Writing

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.

Provides an overview of the grant proposal process, including developing ideas, locating funding sources, and researching, writing, and presenting a proposal. Students will apply the skills learned throughout the course by creating a fully researched grant proposal.

## ENGL 231 American Literature 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall of odd years.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.
Studies movements and themes in representative works of major American authors from Colonial literature through Romanticism.

## ENGL 232 American Literature 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring of odd years.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.
Presents a study of works by representative American authors from realism and naturalism to the present.

## ENGL 235 American Ethnic Literature

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall of even years.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.

This course introduces students to significant literature written by ethnic American authors, including African Americans, American Indians, Chicano/as and Latina/os, Asian Americans, and Jewish Americans. As such, it is designed to provide an overview of important works of American ethnic literature across genres and styles. We will explore both the literary and cultural elements that distinguish each work. In addition to discussing each text on its own terms, we will consider how each work functions within a broader context of ethnicity. As we go along, we will be introduced to specific cultural and historical issues related to each work.

## ENGL 251 Children's Literature

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: None.

This course presents a study of the genres of literature for children and young adults. The emphasis is upon the qualities that are inherent in successful literature for this age group. Comparative multicultural readings may include picture books, fairy tales, modern fantasy, realistic fiction, and nonfiction.

## ENGL 261 Creative Writing/Fiction

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Summer.
Prerequisite: None.
Introduces fundamentals in the writing of short fiction. The course is designed to enhance comprehension of the creative process through directed writing in the short story genre. Workshop approach includes analysis of student as well as professional writings.

## ENGL 263 Creative Writing/Poetry

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring of even years.
Prerequisite: None.
Introduces fundamentals in the writing of poetry. The course is designed to enhance comprehension of the creative process through directed writing in poetry. Workshop approach includes analysis of student as well as professional writings.

## ENGL 265 Creative Nonfiction Writing

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring of odd years.
Prerequisite: None.
Introduces fundamentals in creative nonfiction, a genre that incorporates literary techniques and styles into the crafting of engaging and factual narratives. As a core component of the Professional Communications program, the course is designed to enhance comprehension of the writing process through directed writing and reading in the creative nonfiction genre. Workshop approach includes analysis of student writings as well as professional writings.

## ENGL 282 Survey of British Literature 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring of even years.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103 W .
Provides a study of British Literature from Romanticism to the Modern Period (Blake to Beckett) concentrating on major figures and works and on contemporary methods of evaluation.

## ENGL 299 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1 to 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Permission of Department Chairperson or Dean.

This course is for students who have completed all available courses in this subject area or who have a special interest in this subject area outside of the regular curriculum.

## Environmental Science

## ENST 112 Environmental Science

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: None.

Explores the relationships between living and nonliving components of the environment and provides insight into man's impact on the natural world. Includes laboratory and field work activities.

## Fire Science

## FISC 102 Firefighting 2

12 credit hours, 14 contact hours (Lecture: 10; Lab: 4); Semesters Offered: Variable. Prerequisite: None.

Includes basic firefighting skills while utilizing tools and equipment commonly used by municipal fire departments. Hazardous Materials Operation ( 24 hour) level training is a required component. These credits are available to students who present a valid Firefighter I \& II certificate from the Michigan Fire Fighters Training Council or the Indiana Public Safety Institute with Hazmat training.

## FISC 110 Fire Prevention

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.

Introduces students to an important function of any progressive fire department - fire prevention. Major topics include fire prevention inspection techniques, the importance of code enforcement procedures and developing public fire education programs.

## FISC 111 Building Construction

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.

Students will explore the methods and materials used to construct buildings, how the design and engineering of a structure can influence smoke and fire travel and how the structural integrity of a building is affected by fire. The safety of building occupants and firefighters is emphasized.

## FISC 112 Fire Service Tactics

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.

Examines modern firefighting techniques used to effectively mitigate a variety of incidents. Students will review different tactics related to general and specific fire situations. This course is designed to prepare firefighters and fire officers to successfully execute strategic assignments from incident managers.

## FISC 210 Fire Cause Determination

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.

Firefighters and Fire Officers will learn how to determine the origin and cause of a fire. Identifying and preserving evidence, recognizing when the assistance of a more highly trained investigator is needed, and courtroom procedures will be discussed.

## FISC 211 Instructional Techniques

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.

A comprehensive approach to the basics of instructing and presenting. Students will study characteristics of adult learners, learn to identify training needs, develop outlines, and make presentations in class. The operation of audio/visual equipment will be demonstrated.

## FISC 213 Introduction to Fire Detection and Suppression Systems

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.

This course is the study of basic built-in fire detection, alarm, and extinguishing systems.

## Geography

## GEOG 110 Physical Geography

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring. Prerequisite: None.

Surveys major earth systems (atmosphere, hydrosphere, and lithosphere) that interact to produce the physical environment. Investigates plate tectonics and agents of erosion and deposition (water, ice, wind, gravity) and resulting surface features and landforms. Explores atmospheric heating, pressure, and circulation patterns as a basis for understanding weather, disturbances, and climate. Laboratory and group activities illustrate principles and methods of physical geography.

## Health Education

## HEED 101 Medical Terminology

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Designed to acquaint the student with the basic structure of medical terms (including prefixes, suffixes, roots, and their combining forms and plurals). Proper pronunciation, spelling, definition of medical terms and building a professional medical vocabulary is emphasized.

## HEED 116 Phlebotomy

5 credit hours, 6 contact hours (Lecture: 4; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Satisfactory test scores; Permission of the Dean; HEED 101 preferred.
Provides training to meet today's health care facilities' phlebotomy requirements. Upon successful completion of the course, the individual will be eligible to take the national certification exam. A separate application is required for this course and acceptance into the program is by interview process. NOTE: Students must also successfully complete clinical experience (4 credits) to be eligible for the certification exam. This class is not repeatable after previously failing the course.

## HEED 117 ECG Technician

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall (Dowagiac campus).
Prerequisite: None.
Designed to provide students with the basics of performing a 12-lead ECG using a multi-channel or single channel machine. The student will learn how to correctly operate equipment, apply and run the leads, obtain a reading, and recognize normal and abnormal rhythms. NOTE: Students are eligible for the national certification examination upon successful completion of this course.

## HEED 118 Introduction to Health Care Systems

1 credit hour, 1 contact hour (Lecture: 1; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
An introduction to health care structure, licensing, specialties, ethics, legalities, basic financing, and professionalism.

## HEED 120 Nurses Assistant

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Satisfactory test scores; Permission of the Dean. Additional Cost: $\$ 15.00$.
Designed to provide the student with the knowledge and skill necessary to perform uncomplicated tasks in the personal care of sick and/or disabled patients and in the maintenance of a safe and healthful environment for those patients. At the conclusion of the course, the student is eligible to complete the nurse's aide certification exam as prepared by OBRA. Students must successfully pass a Michigan state background check proving no history of any felony and most misdemeanors prior to course registration. See specific semester course offerings for details.

## HEED 131 Emergency Medical Technician 1

5 credit hours, 7 contact hours (Lecture: 3; Lab: 4); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed. Additional Cost: $\$ 15.00$.

The Emergency Medical Technician is an entry level course into the delivery of pre-hospital emergency medical care. This program provides both written and practical instruction emphasizing the knowledge and skills utilized by the EMT as a health care professional. Upon successful completion of both the written and practical components of HEED $131 \& 132$, students are eligible to take the Michigan Department of Public Health, Division of Emergency Medical Services, and Licensure Examination for Emergency Medical Technicians.

## HEED 132 Emergency Medical Technician 2

5 credit hours, 7 contact hours (Lecture: 3; Lab: 4); Semesters Offered: Spring.
Prerequisite: Successful completion of both the practical and written components of HEED 131; Permission of the Dean.
Additional Cost: $\$ 15.00$.
This is a continuation of HEED 131. Upon successful completion of both the written and practical components of HEED 131 \& 132, students are eligible to take the Michigan Department of Public Health, Division of Emergency Medical Services, Licensure Examination for Emergency Medical Technicians.

## HEED 137 Disease Overview

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in HEED 101, BIOL 110; minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment in ENGL 115 allowed.

A study of common human diseases including prevention, etiology, signs and symptoms, pharmaceutics, diagnostic and treatment modalities, prognoses, and the use of medical references for research verification.

## HEED 163 Nutrition

2 credit hours, 2 contact hours (Lecture 2; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in CHEM 100 or BIOL 110.
A comprehensive study of the principles of nutrition as applied to healthy people of all ages.

## HEED 170 Developing Skilled Learners in Nursing and Allied Health

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment in ENGL 115 allowed; ISYS 110.

This course will provide the pre-nursing student with an overview of the nursing curriculum and demonstrate how past, present, and future courses will form the foundation of the nursing curriculum. Learning Style Assessments, critical thinking, problem solving, blending knowledge with application in situations and NCLEX testing will be explored. Students will learn to break old study habits and develop a personal plan for academic success.

## HEED 190 Health Career Exploration 1

1 credit hour, 1 contact hour (Lecture: 1; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.

The purpose of this course is to explore a variety of health career occupations. The student will actively research these career options and the requirements necessary for each of these allied health professions and have an opportunity to job shadow.

## HEED 191 Health Career Exploration 2

3 credit hours, 4.5 contact hours (Lecture: 1.5; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in HEED 190, concurrent enrollment allowed.
This course is a continuation of HEED 190. In this course students will continue to explore health career professions and continue with their development of professional skills. A large part of this course will involve job shadowing of various health careers.

## HEED 251 Phlebotomy Clinical

4 credit hours, 4 contact hours (Lecture: 0; Lab: 4); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in HEED 116; Permission of the Dean. Additional Cost: $\$ 35.00$.
This 120-hour, non-paid, clinical experience will offer the student a series of activities that will require on-the-job application of the skills and knowledge acquired in HEED 116. The student must be able to attend the clinical site for a minimum of 20 hours a week. Successful completion of this course will make the student eligible for a national certification examination. Students will be required to undergo a criminal background check and/or urine drug screen.

## HEED 290 Clinical Health Career Academy Internship 1

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in HEED 101, 120, 190, 191, and valid CNA certification.
The 30 -hour non-paid internship experience will offer students a series of activities and on the job experience of the skills and knowledge acquired in HEED 120. Students must be able to attend the clinical site for a minimum of 2 hours each week. TB test, background check and drug screening required, fee paid by school affiliate. This is an internship and therefore requires a final grade of "C" or better.

## HEED 291 Clinical Health Career Academy Internship 2

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in HEED 290.
This 30 -hour non-paid internship experience will offer the student a series of activities and on the job experience of skills and knowledge acquired both in HEED 120 and HEED 290. The student must be able to attend the clinical site for a minimum of 2 hours each week. TB test, background check and drug screening required, fee paid by school affiliate. This is an internship and therefore requires a final grade of " C " or better.

## Health Information Technology

## HIMS 101 Introduction to Health Information Management Systems

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed. Note: A grade of C or better is required to pass this course successfully.

This course introduces Health Information Management (HIM) and its role in healthcare delivery systems. Topics include standards, regulations and initiatives; payment and reimbursement systems, healthcare providers and disciplines; and electronic health records (EHRs). Upon completion, students should be able to demonstrate an understanding of health information management and healthcare organizations, professions and trends. This course requires a final grade of "C" or better.

## HIMS 180 Health Care Law

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in HIMS 101; minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment in ENGL 115 allowed. Note: A grade of C or better is required to pass this course successfully.

This course covers legal terminology in addition to legislative and regulatory processes. Topics include confidentiality; privacy and security policies, procedures and monitoring; release of information policies and procedures; and professional-related and practice-related ethical issues. Upon completion, students should be able to implement policies and procedures for access and disclosure of Protected Health Information (PHI) as well as apply and promote ethical standards. This course requires a final grade of "C" or better.

## HIMS 201 ICD Coding

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in BIOL 110, HEED 101, and HEED 137; concurrent enrollment in HIMS 202 required.
Note: A grade of $C$ or better is required to pass this course successfully.

This course reviews the principles of coding diseases, conditions and diagnosis utilizing the International Classification of Disease-10 th revision system. The course will include lab practice, using both computerized and manual methods. This course requires a final grade of " $C$ " or better.

## HIMS 202 CPT Coding

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in BIOL 110, HEED 101, and HEED 137; concurrent enrollment in HIMS 201 required.
Note: A grade of $C$ or better is required to pass this course successfully.

This course reviews the principles of coding using the Current Procedural Terminology (CPT) system. The course will include laboratory practice in the assignment of codes using both computerized and manual methods. This course requires a final grade of "C" or better.

## HIMS 203 Advanced Clinical Coding

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in HIMS 201 and HIMS 202. Note: A grade of C or better is required to pass this course successfully.

This course reviews the principles of coding diseases, conditions, procedures, and services utilizing various classification and coding systems presented in earlier courses. Detailed and complex case studies from patient records will be used in exercises to reinforce coding theory and skills. New advancements in clinical coding, not covered in previous course work will also be introduced. This course requires a final grade of "C" or better.

## HIMS 205 Health Information Management Science

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in HIMS 101. Note: A grade of C or better is required to pass this course successfully.

This course covers EHR systems, design, implementation and application. Topics include EHR, Informatics, speech \& imaging technology, information/network security \& integrity, data dictionaries, modeling and warehousing. Upon completion students should be able to facilitate usage of electronic health record systems and other technologies. This course requires a final grade of "C" or better.

## HIMS 210 Quality Assurance

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in HIMS 101. Note: A grade of C or better is required to pass this course successfully.

This course reviews the concepts and procedures utilized in the performance of quality assurance in the health care system. This course covers maintenance, compilation, analysis, and presentation of healthcare statistics and research protocols and techniques. Topics include basic statistical principles, indices, databases, registries, vital statistics, descriptive statistics, research protocol monitoring, Institutional Review Board processes, and knowledge-based research techniques. Upon completion, students should be able to apply, interpret, and present healthcare statistics and utilize research techniques to gather and interpret healthcare data. This course also introduces principles of quality assessment and improvement, and utilization, risk, and case management, in healthcare. Topics include Continuous Quality Improvement, and case management processes, data analysis/reporting techniques, credentialing, regulatory quality monitoring requirements, and outcome measures and monitoring. Group and individual assignments will be completed in the following areas of study: quality assurance and management, performance improvement, statistical presentation, resource management, and risk management. This course requires a final grade of "C" or better.

## HIMS 255 Health Information Technology Internship

4 credit hours, 4 contact hours (Lecture: 0; Lab: 4); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in all other courses required in HIT Program; concurrent enrollment in HIMS 290 required.
Permission of the Dean is required for registration. Note: A grade of $C$ or better is required to pass this course successfully.

In this course, the student, with assistance from the Program Director, HIT, will be placed in a hospital or other health agency to apply the principles that have been learned in health information technology. The student will be on-site 80 hours. This is an internship and therefore requires a final grade of " $\mathbf{C}$ " or better.

## HIMS 290 HIMS Capstone

2 credit hours, 4 contact hours (Lecture: 0; Lab: 4); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in all other courses required in HIT Program; concurrent enrollment in HIMS 255 required.
Permission of the Dean is required for registration. Note: A grade of C or better is required to pass this course successfully.

Incorporating the Domains, Sub domains, and tasks for the two year HIT Program from the American Health Information Management Association into projects, oral and written presentations, case studies along with completion of mock accreditation exams. Students will be eligible to sit for the national Registered Health Information Technician (RHIT) credentialing examination after completing the two-year degree. This is a capstone course and therefore requires a final grade of "C" or better.

## History

## HIST 101 Western Civilization 1

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

The development of the Western tradition from its origins in antiquity to 1500: emphasizing the nature of history and the essential ideas, individuals and events responsible for shaping the cultural, political and economic institutions of the Western World.

## HIST 102 Western Civilization 2

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

An orientation and analysis of the major social, economic, political and intellectual forces contributing to the dramatic rise of the West to preeminence from 1500 to the present. Major emphasis is directed to the industrial, intellectual and political revolutions, and their impact upon contemporary western institutions.

## HIST 201 United States History 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

An introduction to the development of American institutions and values from European backgrounds through the post-Civil War reconstruction. Emphasis is upon those factors having the greatest impact upon the present.

## HIST 202 United States History 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
A continuation of History 201 from the period of rapid industrialization in the Civil War era through the present.

## HIST 230 Michigan History

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This course offers a comprehensive survey of Michigan peoples from the pre-Columbian period to the present. Leading topics include Native American societies, the colonial era and statehood, the Underground Railroad and Michigan in the Civil War, demographic, geographic and cultural transformations as related to the rise of industrialism, and rising challenges in the state's development since the 1950s. Salient social, political and economic issues are addressed, as are developments regarding religion, race and gender. Throughout the course, Michigan's unique identity, demonstrated via its context within U.S. and global events, is revealed.

## HIST 248 Native American History

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall of odd years.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

This course surveys the history of American Indians from pre-Columbian times to the present. It examines relationships between Native peoples and colonial Americans, and subsequently, with the United States. Students further receive introduction to American Indian customs and cosmology.

## HIST 290 Special Topics in History

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring of odd years.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

This course particularly aims to develop understanding and appreciation for diversity through a rotation of such classes as African American history and the history of women in America. A second leading task of the course is to introduce practice in historical interpretation and methods. Students may reenroll in this course as given the variety of special topics available.

## HIST 299 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1 to 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Permission of Department Chair or Dean.
This course is designed for students who have completed all available courses in this subject area or who have a special interest in this subject area outside the regular curriculum.

## Humanities

## HUMA 202 Introduction to American Pop Culture

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.

An exploration of American popular culture in the post-WWII era. The disciplines of history, anthropology, literature, music and sociology are used as vehicles for the exploration.

## HUMA 204 Introduction to Film

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.

An introduction to the art of the film via viewing of representative foreign, as well as American films. The course focuses on the content of films (e.g., social, cultural, thematic dimensions) as well as exploring the varied technical aspects of movie making that shape the final artistic product.

## HUMA 205 Great American Films

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.

An exploration of American cinema from the silent film era to the present. A selection of classic films is viewed in class and then discussed in terms of content and cinematic technique. The course explores how the films viewed reflect themes in American culture.

## HUMA 210 Introduction to Non-Western Civilization

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.

An exploration of the civilizations of Africa, Asia, and other Non-Western areas. The disciplines of history, anthropology, literature, music and sociology are used as the vehicles for the exploration.

## Industrial Technology

## INTE 126 Introduction to Manufacturing Systems

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Students will learn a broad range of modern manufacturing techniques utilized in industry. Among topics covered will be production methods utilizing a variety of materials including both ferrous and non-ferrous metals and plastics. Students will also learn assembly techniques needed for low and high volume manufacturing and how these meet the requirements of industry. Other topics will include ethics, social and environmental responsibilities, the evolution of modern practices and methods, and the challenges to manufacturing industries competing in a global economy.

## INTE 140 Blueprint Reading

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Instruction and practice in methods to communicate technical ideas through the use of blueprints are emphasized. Students will develop skill in reading and interpreting blueprint drawings. Instruments are used to make orthographic drawings that accurately describe shape and size, including sketching multi-view, sectional views, auxiliary views and pictorial illustrations.

## INTE 159 Hydraulics and Pneumatics

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MATH 101 or satisfactory test score, concurrent enrollment allowed; minimum grade of C in ENGL 115 or satisfactory test score, concurrent enrollment allowed.

This course consists of lectures and laboratory work in the basic laws of physics with an emphasis on hydraulic and pneumatic principles in an industrial environment.

## INTE 227 Industrial Robotics

2 credit hours, 4 contact hours (Lecture: 1; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

This course is designed as an introductory course in robot application, programming, and troubleshooting. Simple programs will be written and edited. Students will obtain hands-on experience with common industrial robots and/or training simulators.

## INTE 229 Industrial Robotics Vision

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grades of C in INTE 227.
This course covers the basic tasks and procedures required to work with a vision system on an industrial robot. Topics include set up, teaching, testing, troubleshooting and modifying vision applications.

## INTE 240 Precision Inspection

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This course is designed to teach students the methods of inspecting industrial products with the emphasis on the use of precision instruments.

## INTE 245 Robot Integration and Automation

2 credit hours, 4 contact hours (Lecture: 1; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grades of C in INTE 159, INTE 227 and ELEC 233.
This course covers integration of industrial robots with PLC's, material handling equipment, and stand-alone equipment. Students will design an automated system that uses a robot in a work cell and program, debug, and troubleshoot the system.

## INTE 255 Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Completion of 30 technology credits with a minimum grade of $C$ and permission of the program advisor.

This is a capstone course in which the student searches independently, with assistance from the School of Advanced Technology faculty, for a business or industry related to the program in which he/she is enrolled to complete 144 hours per credit of a specified project or objectives. The student will be placed, supervised, and evaluated under the direction of a college staff member to insure a meaningful internship experience. The student must meet with the Internship Coordinator prior to registering for this course. This is an internship and therefore requires a final grade of " $\mathbf{C}$ " or better.

## Information Systems

## ISYS 110 Introduction to Computer Technology

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer. Prerequisite: None.

This course provides the student with an understanding of the basics of computing operations, key applications, and working in an online environment. More specifically, this course covers operating systems, word processing, spreadsheets, presentation software, electronic mail, networks, using the internet, and the impact of computing and the internet on society.

## ISYS 115 Programming Logic and Design

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: \$127.00.
This is an introductory course in computer programming logic and design. The student will learn concepts applicable to all programming languages. Topics include data types, arrays, logic control structures, algorithms, structured programming methods, report generation, memory addressing schemes, functions and modules. Students will learn to use charts commonly used in business and information processing. Program logic will be developed using flowcharts and pseudocode to create structured solutions to problems. Several integrated lab exercises will be completed using commercial development software.

## ISYS 181 Spreadsheets

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ISYS 110. Additional Cost: $\$ 100.00$.

Offers an introduction to spreadsheet design and application. The use and design of worksheets, templates, databases, charts, and macros will be emphasized to create easy-to-use customized applications. The student will develop a project for a business environment. Current versions of spreadsheet applications will be used. This leads to advanced certification.

## ISYS 182 Database I

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: $\$ 100.00$.
Offers an introduction to the relational data base model using common DBMS business software. Relational database design theory, including the normalizing process, will be emphasized. Data definition, entry, updating, retrieval, reporting, and manipulation will be covered. The student will develop a term project using commercial database software such as Oracle or SqlServer. This course leads to advanced study and certification.

## ISYS 200 Integrated Applications and Technologies

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 110.
Introduces students to technological innovations in business and industry. Includes topics such as electronic communication, audio conferencing, video conferencing, and source document automation, including voice recognition.

## ISYS 201 IT Support

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.
This course covers concepts of support of internal users and external customers. Students will learn self-management skills, communication skills, trouble shooting and problem solving techniques and demonstrate an understanding of the roles and responsibilities of the support specialist. This course will introduce tools and techniques for incident tracking, asset management and change management.

## ISYS 207 Managing and Maintaining PCs

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: \$197.00.

Teaches students how to isolate and correct minimal hardware problems and is a survey of operating systems. Students will learn to install, use, and troubleshoot internal computer components and support operating systems. This class also provides information on how to maintain a healthy system through preventative maintenance and diagnostic testing. The intent of this course is to prepare students to become better PC support technicians in order to extend the operational life of the PC. This course leads to certification. This course requires students to take two third party assessments.

## ISYS 215 Selected Topics in Information Technology

2 to 3 credit hours, 2 to 4 contact hours (Lecture: 2 to 4; Lab: 0 to 2); Semesters Offered: Variable.
Prerequisite: None.
Various topics in computer information systems are addressed.

## ISYS 225 C++ Programming

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 115. Additional Cost: \$295.00.
An intermediate course that introduces features of the "C++" programming language through problem solving, algorithm design, and structured program development. Students will design, code, test and debug several programs using a commercial Integrated Development Environment (IDE). Topics include keyboard and file input, arithmetic, relational, and conditional operators, control structures, pointers, strings, arrays, functions, subroutines, input/output, dynamic allocation principles, and object-oriented design.

## ISYS 227 JAVA Programming 1

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ISYS 115 or permission of department chair.
An intermediate course that introduces the Java programming language and object oriented programming. Topics will include: control statements and methods, arrays, classes, inheritance, polymorphism, string handling, graphics generation, file input/output and multi-threading. Students will design, code, test and debug several Java applets using objects in the standard Java libraries.

## ISYS 228 JAVA Programming 2

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 227. Additional Cost: \$127.00.
A continuation of the Java Programming I course, which will culminate in the certification examination. Topics will include, stacks, queues, exception handling, objected oriented programming, abstract classes, interfaces, JavaFX, animation, binary, recursion, networking, Java Database, and Java Server. Students will design, code, test and debug their applications while gaining an understanding of the Java libraries and building fluency in the Java syntax.

## ISYS 229 Scripting Languages

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 115. Additional Cost: $\$ 127.00$.
An intermediate-level course that introduces the powerful JavaScript and Python scripting languages. Topics include language syntax, class definitions, control structures, function definitions, and basic data collections. Students will write stand-alone programs to perform various tasks including interfacing to system libraries, retrieving information from web sites, and connecting to databases.

## ISYS 234 Database 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: None. Additional Cost: \$127.00.

An advanced course covering database terminology, data structure design, data retrieval and manipulation. Hands-on laboratory activities cover database server installation, configuration, functional components and architecture, user administration and security, performance monitoring, client application access, and backup and recovery. Lab exercises will focus on how to design and implement SQL database tables and functional structure. Report writing and report applications will also be discussed. The student will develop a term project using commercial database software such as Oracle or SqIServer.

## ISYS 241 Introduction to Web Development

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: None. Additional Cost: \$127.00.
A beginning website development course that introduces client-side website project planning and design. Graphic techniques will also be discussed and practiced. Commercial web development software will be used to design and implement web pages, which will include forms, tables, embedded media, and responsive design, implemented through cascading style sheets. Web languages used to develop Web sites will be covered, including HTML5, CSS3, PHP, and JavaScript. Students will develop their own ePortfolio as a term project. This course leads to certification.

## ISYS 251 Web Development 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 115 and ISYS 241. Additional Cost: $\$ 127.00$.
A web authoring course focused on the theory, design and construction of the server-side portion of web pages and sites. Windows, MySQL, Apache, PHP, and JavaScript will be used to configure and manage the back end of web-based applications. Topics will include: information architecture concepts, usability, layout, template development, site management, and web project management. This course will provide comprehensive instruction on how to use commercial software to build and publish a web site. This course will also cover security issues as related to Web server application and leads to PHP certification.

## ISYS 255 Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in BUSI 240, concurrent enrollment allowed, and approval of department chair.
This is a capstone course in which the student searches independently, with assistance from the School of Business faculty, for a business or industry related to the program in which he/she is enrolled to complete 144 hours of a specified project or objectives. Once the student has secured a site, the student will be supervised and evaluated under the direction of a college staff member to insure a meaningful internship experience. The student must meet with the Internship Coordinator prior to registering for this course. This is an internship and therefore requires a final grade of "C" or better.

## ISYS 260 Wireless Communications

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 207.

Introduces skills required to function at the entry level in wireless data communications. Teaches fundamental wireless communications and provides an overview of protocols, transmission methods, and IEEE standards. This course examines the broad range of wireless communications technologies available beginning with the basics of radio frequency and wireless data transmission and progressing to the protocols and mechanisms that every wireless network technician should understand. Topics cover technologies for Wireless Personal Area Networks (WPANs), Wireless Local Area Networks (WLANs), Wireless Metropolitan Area Networks (WMANs), and Wireless Wide Area Networks (WWANs) giving an overview of the most current cellular and satellite communications.

## ISYS 271 Networking Essentials

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ISYS 207, concurrent enrollment allowed. Additional Cost: $\$ 160.00$.

Covers the overall physical layouts of various types of local area networks. It will provide information and discussion of network operating systems, file servers, workstations, network topologies, protocols, cabling, network applications, and current topics related to networks. This course requires students to take a third party assessment; there will be an additional charge for the exam.

## ISYS 272 Configuring Windows Devices

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ISYS 281. Additional Cost: $\$ 95.00$.

This course provides students with the skills and knowledge needed to plan, design, and implement a Windows desktop infrastructure. The course provides guidance on planning and deploying desktops by using several technologies such as User State Migration Tool (USMT), Microsoft Deployment Toolkit (MDT), Virtual Desktop Infrastructure (VDI), and more. Additionally, the course describes how to protect desktops and monitor their health and performance.

## ISYS 275 C\#/.Net Programming

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 115. Additional Cost: \$165.00.
An advanced course for students who have a basic understanding of arrays, pointers, structures and object oriented programming. The goal of this course is to provide students with the knowledge and skills they need to develop C\# applications for the Microsoft .NET Platform. The course focuses on C\# program structure, language syntax, and implementation details.

## ISYS 276 Mobile Applications

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ISYS 115.
An intermediate course that introduces the fundamentals of writing Android applications developed using a customized version of Java. The course will also introduce more advanced techniques and features available in the Android SDK, using development platforms such as Eclipse or Android Studio. Topics will cover a variety of the features commonly used in popular Android applications.

## ISYS 281 Installing Windows Server

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 207 and ISYS 271. Additional Cost: $\$ 98.00$.
Introduces students to Windows Server. Students will learn to use Windows commands and utilities to manage a single server network. This course will include hands-on experience to familiarize students with basic installation and administration of Windows Server. This course requires student to take a third party assessment; there will be an additional charge for the exam.

## ISYS 282 LINUX

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: None.
UNIX is considered the operating system of the web. This course will cover basics of UNIX concepts, architecture and administration. Students will develop applications using file processing, shell programming, UNIX utilities, and other UNIX applications. Current versions of UNIX or Linux will be used.

## ISYS 283 Administering Windows Server

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ISYS 281. Additional Cost: $\$ 98.00$.
Students taking this course will learn how to set up, configure, and maintain a Windows Server Infrastructure. Topics covered include administering, diagnosing, and troubleshooting; Directory Services, DHCP, DNS, network security, outing and remote access, and system performance. This course leads to certification. This course requires students to take a third party assessment; there will be an additional charge for the exam

## ISYS 284 Advanced Windows Server

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ISYS 281. Additional Cost: $\$ 98.00$.
This course teaches the student skills and knowledge necessary to perform advanced management and provisioning of services within the Windows 2012 environment.

## ISYS 285 Network Security

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ISYS 207, concurrent enrollment allowed. Additional Cost: $\$ 210.00$.

This course will provide a comprehensive overview of network security. This course is mapped to Comp TIA's Security+ Certification exam. This course will cover general security concepts, communication security, infrastructure security, cryptography, and operational/ organizational security. This course requires students to take a third party assessment; there will be an additional charge for the exam.

## ISYS 288 CISCO Routers and Switches

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ISYS 271. Additional Cost: \$310.00.
This course is a comprehensive guide for anyone wishing to obtain a solid background in basic CISCO networking concepts. Students are first introduced to theory-based concepts, which are follow-up with practical hands-on labs. Students learn skills to configure, install, and troubleshoot CISCO routers and switches.

## ISYS 289 Installing and Configuring Windows

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 281. Additional Cost: $\$ 95.00$.

This course teaches the student skills needed to design, deploy, and manage a physical and virtual Windows Server application management infrastructure, and focus on using Microsoft System Center. Students will also learn to design, deploy, and manage Windows Enterprise applications in a physical and virtual environment.

## ISYS 290 Systems Analysis

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ISYS 115; ISYS 275 recommended.

An examination of business operations concerned with the design and maintenance of forms, records and office systems to include study of input/output systems, work flow planning, office layout, work measurement and types of business procedure specifications. Information retrieval research will also be included. Basic tools of system analysis are introduced such as the systems flowchart, decision tables, GANTT charts and Dataflow Diagrams.

## ISYS 294 Software Engineering 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ISYS 115; ISYS 227 or ISYS 275.

Advanced course covering topics in software design and implementation including development paradigms, project requirements and specifications, object-oriented development, graphical user interface (GUI) design, event-driven systems, CASE tools, and the maintenance and management of systems software. UML will be used to model the phases of the software engineering process, and exercises will emphasize a hands-on approach to Object Oriented software development.

## Paralegal

## LEGA 102 Law in the United States

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed. Additional Cost: $\$ 35.00$.

The goal of the course is to provide a basic understanding of the U.S. legal system from a variety of perspectives, both civil and criminal. The course focus includes essential history and the working structure of the government, procedural issues in the courts, specific concepts of basic categories of law such as contract law and property, the distinctive characteristics of criminal law and procedure, and the roles of various legal professionals and the effect of legal ethics on the practice of law. Also, the course will introduce legal terminology. It is intended that the course lay a solid foundation for those who intend to pursue advanced legal courses and to provide a functional appreciation for students of other disciplines with regard to the impact of the legal system on those disciplines.

## LEGA 203 Legal Research and Writing 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in LEGA 102 and ENGL 103 or ENGL 103W, concurrent enrollment allowed. Additional Cost: $\$ 35.00$.

This course is designed to provide an in-depth examination of law library resources, including electronic resources, and research methods. After learning the research methods, the student will apply the research by writing legal memorandums, opinion letters, and motions.

## LEGA 204 Legal Research and Writing 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in LEGA 203. Additional Cost: $\$ 35.00$.

This course is designed to provide a continuation of LEGA 203, Legal Research and Writing 1. In this course, students will continue to explore legal research tools and apply their knowledge through writing appellate brief, mediation summaries, and other forms of legal research documents.

## LEGA 205 Criminal Litigation

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in LEGA 102 and LEGA 203. Additional Cost: $\$ 35.00$.

This course is designed to provide an in-depth analysis in the pre-trial, trial, and post-trial procedures in a typical criminal litigation. This will be done by studying constitutional safeguards and procedures necessary from arrest through trial and sentencing. Also, this course will examine substantive elements of crimes and defenses.

## LEGA 206 Civil Litigation

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in LEGA 102 and LEGA 203. Additional Cost: $\$ 35.00$.

This course is designed to provide an in-depth analysis in the pre-trial, trial, and post-trial procedures involved in a typical civil litigation. Students will develop an understanding of investigation of claims, jurisdiction, venue, pleadings, motion practice, discovery, trials, post-trial matters, and general litigation strategy.

## LEGA 220 Torts

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in LEGA 102 and LEGA 203. Concurrent enrollment with BUSI 207 recommended. Additional Cost: \$35.00.

This course is designed to provide an in-depth analysis of tort law, including intentional torts, strict liability, product liability, negligence, malpractice, premise liability, consumer protection, and other areas of tort liability.

## LEGA 230 Wills, Trusts, and Probate

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in LEGA 102 and LEGA 203. Additional Cost: $\$ 35.00$.
This course is designed to provide an in-depth analysis of estate planning including collecting data regarding assets and drafting estate planning documents including powers of attorney, wills, inter vivos trusts, and testamentary trusts. Students will also learn about estate administration, guardianships, and conservatorship.

## LEGA 240 Bankruptcy

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in LEGA 102 and LEGA 203. Additional Cost: $\$ 35.00$.
This course is designed to provide an in-depth analysis of legal issues, rights, and remedies involving debtors and creditors. Topics covered include collections, garnishments, receiverships, and Chapters 7, 11, 12, and 13 bankruptcy.

## LEGA 255 Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer. Prerequisite: Minimum grade of C in BUSI 240, concurrent enrollment allowed; and permission of Internship Coordinator. Additional Cost: $\$ 35.00$.

This course is designed to be a capstone course in which the student searches independently, with assistance from faculty, for a paralegal position to complete 144 hours of a specified project or objective. Once the student has secured a site, the student will be supervised and evaluated under the direction of a college staff member to insure a meaningful internship experience. This is an internship and therefore requires a final grade of " $\mathbf{C}$ " or better.

## Mathematics

## MATH 098 College Arithmetic

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: None; Placement test score.

Provides a review of operations with whole numbers, fractions, decimals, ratios, proportions, percentages, area and perimeter, as well as an introduction to pre-algebra concepts. This course will not count toward graduation requirements.

## MATH 101 Introductory Algebra

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 098 or satisfactory test score.

Provides an introduction to one and two variable algebraic equations; linear inequalities; graphing with the rectangular coordinate system; polynomial operations; variation; factoring; an introduction to functions; and solving linear equations, systems of linear equations, and quadratic equations. A review of pre-algebra concepts is included.

## MATH 102 Mathematical Literacy

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 098 or satisfactory test score.
Mathematical Literacy is a one semester course for non-math and non- science majors integrating numeracy, proportional reasoning, algebraic reasoning, and functions. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts.

## MATH 127 College Algebra

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 101 or satisfactory test score.
Provides a study of polynomial, quadratic, radical, rational, exponential, and logarithmic functions, their graphs and applications; inverse functions; graph transformations; a review of linear equations and inequalities; systems of linear equations, and an introduction to the theory of equations and complex numbers.

## MATH 128 Contemporary Mathematics

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 101 or MATH 102 or satisfactory test score.
Provides the non-science major with an introduction to ideas and applications of topics in traditional and modern mathematics. Explores the nature of problem solving, logic, numeration systems, the history of mathematics, real numbers, classical and modern geometry, applications of algebra and geometry, finance and probability and statistics. Recommended for the Arts/Humanities and Communications Pathways.

## MATH 129 Finite Mathematics with College Algebra

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MATH 127, MATH 150, or satisfactory test score.
Provides Computer Information Systems and Business curricula with a survey of set theory, graphing, linear equation systems, matrices, linear programming, permutations and combinations, and probability with particular attention to applications in the area of business.

## MATH 130 Precalculus Mathematics

5 credit hours, 5 contact hours (Lecture: 5; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 127 or satisfactory test score.
Provides a review of the fundamentals of algebra, analytic geometry, and complex numbers. Emphasizes advanced algebra topics, trigonometry, and calculus-oriented concepts including a study of linear, polynomial, exponential, logarithmic, and trigonometric functions, their graphs, and applications. Other topics include systems of equations, matrix algebra, sequences and series.

## MATH 141 Analytical Geometry and Calculus 1

5 credit hours, 5 contact hours (Lecture: 5; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 130, or satisfactory test score.
Provides an introduction to functions, limits and continuity, differentiation of algebraic and transcendental functions, applications of derivatives, definite and indefinite integrals, and the Fundamental Theorem of Calculus.

## MATH 142 Analytical Geometry and Calculus 2

5 credit hours, 5 contact hours (Lecture: 5; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 141.

Provides a study of techniques of integration, applications of integrals, improper integrals, parametric equations, polar coordinates, sequences, and series.

## MATH 150 Statistics

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 101 or MATH 102 or satisfactory test score.

This is an introductory course in concepts and methods of statistics with an emphasis on statistical literacy and thinking. Topics include methods of data collection, graphical and numerical descriptive statistics, basic concepts of probability, binomial probability distributions, normal probability distributions, central tendency, confidence intervals and hypothesis tests for proportions, means, and standard deviations, correlation and regression, contingency tables, and analysis of variance.

## MATH 153 Mathematics for Elementary Teachers 1

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in MATH 101 or MATH 102 or satisfactory test score.

Provides the elementary teacher with a minimum foundation in the structure of arithmetic. Includes problem solving techniques, sets, relations, and bases, the properties of natural numbers, integers, rational, and real numbers. Includes selected topics in number theory and algebra.

## MATH 154 Mathematics for Elementary Teachers 2

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MATH 153 or permission of appropriate Dean.

Analyzes geometric figures in the plane and space, including investigations into their transformations and symmetries. Considers fundamental concepts in measurement and construction. Emphasizes active participation in discovering and communicating mathematical ideas and an introduction to probability and statistics.

## MATH 201 Calculus 3

5 credit hours, 5 contact hours (Lecture: 5; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MATH 142.

Provides a study of vector algebra, vector functions and their derivatives, partial derivatives, multiple integrals, and line integrals. Presents selected topics in vector analysis.

## MATH 203 Introduction to Linear Algebra

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in MATH 141 or permission from appropriate Dean.
Provides a study of systems of linear equations and matrices, determinants, vector spaces, subspaces, basis and dimension, linear transformations, and eigenvalues and eigenvectors.

## MATH 205 Differential Equations and Linear Algebra

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in MATH 142.

Provides a study of ordinary differential equations, initial value problems, and linear algebra. Topics include techniques for solving first and second order equations, numerical methods, Laplace transforms, matrix algebra, eigenvalues and eigenvectors, linear independence, vector spaces, solution of systems of linear algebraic and differential equations, applications, and existence and uniqueness theorems.

## MATH 265 Probability and Statistics for Teachers

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MATH 153.

This course covers basic concepts of statistics and probability appropriate for elementary and middle school teachers. Topics include statistical techniques for organizing, summarizing, presenting and interpreting data sampling techniques; and analytic methods in probability.

## Medical Assisting

## MEDA 210 Medical Assistant Clinical Procedures

5 credit hours, 6 contact hours (Lecture: 4; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in BIOL 110, MATH 101, PSYC 101, HEED 101, and SPEE 104.
This course presents theoretical material and clinical skills necessary for the medical assistant in the performance of their role. It includes the theory and clinical skills related to: asepsis, vital signs, history and physical assessment, physical therapy, and other technical skills needed to assist the physician in the clinical setting. This course requires a final grade of "C" or better.

## MEDA 211 Medical Assistant Pharmacology

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in BIOL 110, MATH 101, PSYC 101, HEED 101, and SPEE 104.

This course discusses the basic principles of pharmacology. Emphasis is placed on drug classifications, use of those drugs, routes of administration, dosages, interactions, incompatibilities, and side effects. A lab component will cover various techniques of medication administration. This course requires a final grade of "C" or better.

## MEDA 212 Diagnostic and Lab Procedures

4 credit hours, 5 contact hours (Lecture: 3; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in BIOL 110, MATH 101, PSYC 101, HEED 101, and SPEE 104.
This course prepares the student to perform basic laboratory and diagnostic procedures, including preparation of patients, appropriate set up for various procedures, collecting and preparing appropriate specimens, and expected norms of laboratory test results. This course includes safety and quality control standards. This course requires a final grade of "C" or better.

## MEDA 220 Medical Office Administration

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MATH 101, HEED 101, and SPEE 104.
This course provides an understanding of the administrative duties of the medical assistant in a medical office or clinic. This course helps in the development of communication skills in the medical setting and the role of the medical assistant as a member of the health care team. Included is instruction in medical correspondence and records, filing telephone procedures, appointment scheduling, receptionist duties, and general office management. This course requires a final grade of "C" or better.

## MEDA 221 Insurance Claims Processing

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MATH 101, HEED 101, and SPEE 104.

This course provides an overview of the different types of medical insurance and the methods of handling the various types of insurance forms as they apply to the medical office or clinic. This course requires a final grade of "C" or better.

## MEDA 240 Medical Assistant Clinical Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MEDA 210, MEDA 211, and MEDA 212; Permission of the Dean. Additional Cost: $\$ 20.00$.

This is a capstone course for the Medical Assisting program. This internship provides the student with the opportunity to observe and perform various clinical competencies under the supervision of a preceptor. This learning experience will be scheduled in physician's offices, clinics, or hospitals. The student will complete 48 hours per credit hour ( 144 clock hours) in the virtual or clinical setting. Student will study for the clinical portion of the RMA exam. The student is asked to meet with the Lead Faculty for the Medical Assisting Program prior to registering for this course. Minimum grade of $C$ required in this internship to graduate. This is an internship and therefore requires a final grade of "C" or better.

## MEDA 250 Medical Assistant Administration Internship

3 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MEDA 220 and MEDA 221; Permission of the Dean.

This is a capstone course for the Medical Assisting Program. This internship provides the student with the opportunity to observe and perform various office related competencies under the supervision of a preceptor. This learning experience will be scheduled in physician's offices or clinics. The student will complete 48 hours per credit hour ( 144 clock hours) in the virtual or medical/clinic setting. Student will study for the administrative portion of the RMA exam. The student is asked to meet with the Lead Faculty of the Medical Assisting Program prior to registering for this course. Minimum grade of $C$ required in this internship to graduate. This is an internship and therefore requires a final grade of " $C$ " or better.

## MEDA 251 Medical Assistant Seminar

1 credit hour, 1 contact hour (Lecture: 0; Lab: 1); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Concurrent enrollment in MEDA 240 or MEDA 250 (for AAS program only).

This course will cover current and relevant topics in medical assisting. Examples of current topics to be discussed are: professionalism, patient-centered medical homes, and studying and taking a practice Registered Medical Assistant Exam. Minimum grade of C required to graduate. This is a capstone course and therefore requires a final grade of " C " or better.

## Music

## MUSI 101 Music Theory 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.
Provides the student with a basic foundation in musical skills: reading and writing of pitch and rhythmic notation, scales, key signatures, and triadic structures. A student enrolling in this class must have a basic knowledge of musical notation. Concurrent enrollment in MUSI 105 required for music majors.

## MUSI 102 Music Theory 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MUSI 101 or permission of appropriate Dean.
A study of the basic harmonic materials of 18 th century Western Europe. Emphasis is placed on harmonic analysis, part writing, and harmonizing simple melodies. Some piano skills are required. Concurrent enrollment in MUSI 106 required for music majors.

## MUSI 105 Aural Skills 1

1 credit hour, 2 contact hours (Lecture: 1; Lab: 1); Semesters Offered: Fall.
Prerequisite: None; concurrent enrollment in MUSI 101 required.
Skills covered include aural recognition, writing, and singing of scales, intervals, triads, and elementary rhythms.

## MUSI 106 Aural Skills 2

1 credit hour, 2 contact hours (Lecture: 1; Lab: 1); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MUSI 105 or permission of appropriate Dean; concurrent enrollment in MUSI 102 required.

Continuation of MUSI 105. Intermediate rhythms, triad inversions, and harmonic dictation are introduced.

## MUSI 110 Music Appreciation

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.
An introductory course covering significant aspects of music history and music repertoire of the Western European tradition. Music of non-Western traditions is also outlined. Fundamental knowledge through guided listening and descriptive analysis is stressed. No musical background is necessary to take this course.

## MUSI 113 Jazz Ensemble

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Audition required; concurrent enrollment in either enrichment or credit-bearing Symphonic Band is required, with limited director-approved exceptions.

Open to students who wish to study and perform works in a wide variety of jazz and pop styles. The ensemble utilizes the standard 18 -member "big band" instrumentation. Sight-reading abilities are required. This group performs both on and off campus. The Jazz Ensemble is a primary touring ensemble for SMC. Audition required.

## MUSI 116 Symphonic Band

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: A minimum of four years of previous experience in a traditional wind ensemble/concert band setting is required. Exceptions to be granted with approval of the director.

Open to students who wish to study and perform a wide variety of wind band literature. The Symphonic Band gives two performances each semester and performs at the college's Commencement Ceremony each Summer. Audition or permission of instructor is required. Sight-reading abilities are required, and a minimum of four years of previous experience in a wind band (concert band) is expected.

## MUSI 118 Concert Choir

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Audition or recommendation from Director of Choral Activities. Ability to match pitch is required. Previous choral experience is preferred.

Concert Choir is a large, select choral ensemble, open to all students and community members. It is designed for individuals who wish to give serious study to choral music. Concert Choir performs standard choral repertoire from a variety of musical style periods. The ability to read music is encouraged. This group may be called upon to furnish music at graduation and other functions on and off campus. Repertoire includes one or more major choral works per year.

## MUSI 122 Show Choir

1 credit hour, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring.
Prerequisite: Audition required; Concurrent enrollment in Concert Choir (MUSI 118) is required.
A restricted-entry, top level music ensemble which requires advanced skills in singing, dancing, microphone technique, and stage presence. Sight-reading skills are necessary, and an advanced level of musicianship is required. Ensemble members will be required to participate in performances on and off campus, including performing arts tour. Literature features music from jazz, Broadway, and pop genres. This choir is a primary touring ensemble for SMC.

## MUSI 123 Chamber Singers

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Audition required; concurrent enrollment in Concert Choir (MUSI 118) is required and Applied Music, Music Theory, and Aural Skills are recommended.

This is a highly select vocal ensemble. It is geared for singers with advanced vocal technique and music reading abilities. Ensemble members will be required to participate in performances on and off campus, including tour. This ensemble will perform chamber literature from all stylistic periods, with an emphasis on literature performed acapella. This choir is a primary touring ensemble for SMC.

## MUSI 125 Men's Ensemble

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Audition required.
The SMC Men's Ensemble is a select choral ensemble, open to all students and community members. The choir performs standard choral repertoire from a variety of musical and historical periods. Performances include on and off campus concerts.

## MUSI 141 Class Piano

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: None.
An introduction to basic skills and techniques involved with playing the piano. Note-reading, scales arpeggios, and basic literature will be components of the course. Group instruction (classroom format) is used in place of the one-on-one format of private instruction.

## MUSI 142 Applied Music 1

0.5 credit hours, 0.5 contact hours (Lecture: 0; Lab: 0.5); Semesters Offered: Fall, Spring.

Prerequisite: None. Additional Cost: $\$ 140.00$.

There will be one lesson per week for the semester. Applied music (private instruction) is available for beginning through advanced students. Applied music at each level may be taken for credit up to two semesters. Student will make arrangements with full-time music faculty before the beginning of the semester to ensure proper placement.

## MUSI 143 Applied Music 2

0.5 credit hours, 0.5 contact hours (Lecture: 0; Lab: 0.5); Semesters Offered: Fall, Spring.

Prerequisite: Minimum grade of C in MUSI 142. Additional Cost: $\$ 140.00$.
There will be one lesson per week for the semester. Lessons are one half hour each week for 14 weeks. Applied music (private instruction) is available for beginning through advanced students. Applied music at each level may be taken for credit up to two semesters. Student will make arrangements with full-time music faculty before the beginning of the semester to ensure proper placement.

## MUSI 201 Music Theory 3

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in MUSI 102.
A study of the evolution of harmonic and melodic materials in Western Europe from the late 16th century through the 18th century. Emphasis is placed on analysis of music composed during this period, as well as short composition assignments. Concurrent enrollment in MUSI 205 required for music majors.

## MUSI 202 Music Theory 4

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MUSI 201.

A study of the evolution of harmonic and melodic materials traced through the 20th century. Emphasis is placed on analysis of music composed during the 19th and 20th centuries in Western Europe and the United States. Short composition assignments will also be required. Concurrent enrollment in MUSI 206 required for music majors.

## MUSI 203 Music History 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in MUSI 102.

A study of the history of music in Western Civilization from Antiquity through the Baroque Era. Significant emphasis is on the development of styles, compositional forms, notation, and scales, as well as social, cultural, political, and economic influences.

## MUSI 204 Music History 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MUSI 102.

A study of the history of music in Western Civilization from the late Baroque Era to Contemporary time. Significant emphasis is on the development of styles, compositional forms, notation, and scales, as well as social, cultural, political, and economic influences.

## MUSI 205 Aural Skills 3

1 credit hour, 2 contact hours (Lecture: 1; Lab: 1); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in MUSI 106; concurrent enrollment in MUSI 201 is required.
Continuation of MUSI 106. Two-part melodic dictation and sight-singing, intermediate harmonic dictation including modulation, and more advanced rhythms are introduced.

## MUSI 206 Aural Skills 4

1 credit hour, 2 contact hours (Lecture: 1; Lab: 1); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in MUSI 205; concurrent enrollment in MUSI 202 required.
Continuation of MUSI 205. Three- and four-part melodic dictation, atonal melodic sight-singing and dictation, chromatic harmonies and advanced rhythms are introduced.

## MUSI 213 Jazz Ensemble 2

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Audition required; minimum grade of C in MUSI 113. Concurrent enrollment in either enrichment or credit-
bearing Symphonic Band is required, with limited director-approved exceptions.

Open to students who wish to study and perform works in a wide variety of jazz and pop styles. The ensemble utilizes the standard 18 -member "big band" instrumentation. Sight-reading abilities are required. This group performs both on and off campus. The Jazz Ensemble is a primary touring ensemble for SMC.

## MUSI 214 Jazz Ensemble 3

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Audition required; minimum grade of C in MUSI 213.

Open to students who wish to study and perform works in a wide variety of jazz and pop styles. The ensemble utilizes the standard 18 member "big band" instrumentation. Sight reading abilities are required. This group performs both on and off campus. The Jazz Ensemble is a primary touring ensemble for SMC.

## MUSI 216 Symphonic Band 2

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 116. A minimum of four years of previous experience in a traditional wind ensemble/concert band setting is required. Exceptions to be granted with approval of the director.

Open to students and community members who wish to study and perform a wide variety of wind band literature. The Symphonic Band gives two performances and performs at the college's Commencement Ceremony each summer. Audition or permission of instructor required. Sight-reading abilities are required, and a minimum of four years of previous experience in a wind band (concert band) is expected.

## MUSI 217 Symphonic Band 3

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 216. A minimum of four years of previous experience in a traditional wind ensemble/concert band setting is required. Exceptions to be granted with approval of the director.

Open to students and community members who wish to study and perform a wide variety of wind band literature. The Symphonic Band gives two performances and performs at the college's Commencement Ceremony each summer. Audition or permission of instructor required. Sight reading abilities are required, and a minimum of four years of previous experience in a wind band (concert band) is expected.

## MUSI 218 Concert Choir 2

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 118. Ability to match pitch is required. Previous choral experience is preferred.
The SMC Concert Choir is a select choral ensemble, open to all students and community members. The choir performs standard choral repertoire from a variety of musical and historical periods. Performances include on and off campus concerts.

## MUSI 219 Concert Choir 3

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 218. Ability to match pitch is required. Previous choral experience is preferred.

The SMC Concert Choir is a select choral ensemble, open to all students and community members. The choir performs standard choral repertoire from a variety of musical and historical periods. Performances include on and off campus concerts.

## MUSI 223 Chamber Singers 2

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 123.
This is a highly select vocal ensemble. It is geared for singers with advanced vocal technique and music reading abilities. Ensemble members will be required to participate in performances on and off campus, including tour. This ensemble will perform chamber literature from all stylistic periods, with an emphasis on literature performed acapella. This choir is a primary touring ensemble for SMC.

## MUSI 224 Chamber Singers 3

2 credit hours, 3 contact hours (Lecture: 0; Lab: 3); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 223.
This is a highly select vocal ensemble. It is geared for singers with advanced vocal technique and music reading abilities. Ensemble members will be required to participate in performances on and off campus, including tour. This ensemble will perform chamber literature from all stylistic periods, with an emphasis on literature performed acapella. This choir is a primary touring ensemble for SMC.

## MUSI 225 Men's Ensemble 2

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 125.

The SMC Men's Ensemble is a select choral ensemble, open to all students and community members. The choir performs standard choral repertoire from a variety of musical and historical periods. Performances include on and off campus concerts.

## MUSI 226 Men's Ensemble 3

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 225.
The SMC Men's Ensemble is a select choral ensemble, open to all students and community members. The choir performs standard choral repertoire from a variety of musical and historical periods. Performances include on and off campus concerts.

## MUSI 240 Music for the Classroom Teacher

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.
Designed for elementary education students without regard to previous musical training. Students are prepared to use music functionally and developmentally in the elementary classroom through singing, through playing the piano and informal instruments, and through responding to music rhythmically. Creative aspects and values of music are emphasized, and materials are studied in relation to their future uses in the classroom.

## MUSI 251 Applied Music 3

1 credit hour, 1 contact hour (Lecture: 0; Lab: 1); Semesters Offered: Fall and Spring.
Prerequisite: None. Additional Cost: $\$ 280.00$.

There will be one lesson per week for the semester. Applied music (private instruction) is available for beginning through advanced students. Applied Music at the 200 level is required for Music majors on their major instrument or voice. Applied music at each level may be taken for credit up to two semesters. Student will make arrangements with full-time music faculty before the beginning of the semester to ensure proper placement.

## MUSI 252 Applied Music 4

1 credit hour, 1 contact hour (Lecture: 0; Lab: 1); Semesters Offered: Fall and Spring.
Prerequisite: Minimum grade of C in MUSI 251. Additional Cost: $\$ 280.00$.
There will be one lesson per week for the semester. Applied music (private instruction) is available for beginning through advanced students. Applied Music at the 200 level is required for Music majors on their major instrument or voice. Applied music at each level may be taken for credit up to two semesters. Student will make arrangements with full-time music faculty before the beginning of the semester to ensure proper placement.

## MUSI 253 Applied Music 5

1 credit hour, 1 contact hour (Lecture: 0; Lab: 1); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MUSI 252. Additional Cost: $\$ 280.00$.

There will be one lesson per week for the semester. Applied music (private instruction) is available for beginning through advanced students. Applied Music at the 200 level is required for Music majors on their major instrument or voice. Applied music at each level may be taken for credit up to two semesters. Student will make arrangements with full-time music faculty before the beginning of the semester to ensure proper placement.

## MUSI 299 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1 to 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Permission of the Dean.

This course is designed for students who have completed all available courses in this subject area or who have a special interest in this subject area outside of the regular curriculum.

## Nursing

## NURS 166 Foundations in Nursing

9 credit hours, 17 contact hours (Lecture: 5; Lab: 12); Semesters Offered: Fall, Spring.
Prerequisite: Acceptance to the Nursing Program; Permission of the Dean. Additional Cost: $\$ 13.00$ for insurance and $\$ 170.00$ for Kaplan.

Introduction to the theoretical and practical application of concepts, principles, and skills needed for identifying and meeting basic care needs in a culturally diverse adult client population. Emphasis is placed on utilization of the nursing process, effective communication skills, and clinical nursing skills in the well client. This course requires a final grade of "C" or better.

## NURS 167 Principles of Medication Administration

2 credit hours, 3 contact hours (Lecture: 2; Lab: 1); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in MATH 101 or satisfactory test score; concurrent enrollment in NURS 166; Permission of the Dean. Additional Cost: \$13.00.

Designed to teach the student the mathematical skills essential for safe administration of medications. Topics include: ratio proportion, intravenous solution, apothecary and metric systems, and pediatric dosages. In addition, the student will be required to demonstrate proficiency in the administration of medications in a weekly laboratory setting. This course requires a final grade of " $\mathbf{C}$ " or better.

## NURS 177 Psychosocial Nursing

4 credit hours, 8 contact hours (Lecture: 2; Lab: 6); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in NURS 166, BIOL 215, and NURS 167 (85\%); Permission of the Dean. Additional Cost: $\$ 13.00$.

Theoretical application of concepts, principles, and skills needed for identifying and meeting client care needs. Emphasis is placed on the clinical skills required for the care of the culturally diverse psychosocial client. Clinical experiences with clients experiencing psychosocial challenges will be incorporated into this course. This course requires a final grade of "C" or better.

## NURS 178 Pharmacology 1

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in NURS 166, BIOL 215, and NURS 167 (85\%); Permission of the Dean. Additional Cost: $\$ 170.00$ for Kaplan.

A basic study of drugs, their actions, therapeutic uses and administration, emphasizing the nurse's responsibilities and limitations. This course requires a final grade of "C" or better.

## NURS 180 Nursing Care of Adults 1

4.5 credit hours, 9.5 contact hours (Lecture: 2; Lab: 7.5); Semesters Offered: Fall, Spring.

Prerequisite: Minimum grade of C in NURS 166, BIOL 215, and NURS 167 (85\%); Permission of the Dean. Additional Cost: $\$ 13.00$.

Theoretical and practical application of concepts, principles, and skills needed for identifying and meeting client care needs Emphasis is placed on the clinical skills required for the intermediate care of the culturally diverse adult medical-surgical, obstetric, and pediatric client. Meets Practical Nursing curriculum requirements. This course requires a final grade of "C" or better.

## NURS 201 Maternal and Women's Health Nursing Care

4 credit hours, 8 contact hours (Lecture: 2; Lab: 6); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grades of C in NURS 177, and NURS 178, and NURS 180, and previous or concurrent enrollment in NURS 22; Permission of the Dean. Additional Cost: \$13.00.

Theoretical and practical application of the physical and psychological care of the woman of childbearing age and older, including the care of the antepartum, intra-partum, postpartum, and newborn in a clinical and simulated environment. Emphasis is placed on the clinical skills required for the care of the culturally diverse maternal and newborn client. This course requires a final grade of "C" or better.

## NURS 202 Nursing Care of the Child

4 credit hours, 8 contact hours (Lecture: 2; Lab: 6); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in NURS 201, NURS 228, and NURS 240, and previous or concurrent enrollment in NURS 212; Permission of the Dean. Additional Cost: $\$ 13.00$.

Theoretical and practical application of physiological and psychological care of the pediatric client and family in a clinical and simulated environment. Emphasis is placed on the clinical skills required for the care of the culturally diverse pediatric client. This course requires a final grade of " $\mathbf{C}$ " or better.

## NURS 212 Nursing Leadership

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in NURS 201, NURS 228, and NURS 240, and previous or concurrent enrollment in NURS 212; Permission of the Dean.

Theoretical and practical application of physiological and psychological care of the pediatric client and family in a clinical and simulated environment. Emphasis is placed on the clinical skills required for the care of the culturally diverse pediatric client. This course requires a final grade of "C" or better.

## NURS 228 Pharmacology 2

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in NURS 177, and NURS 178, and NURS 180; Permission of the Dean. Additional Cost: \$170.00 for Kaplan.

This course is a basic study of drugs, their actions, therapeutic uses, and administration emphasizing the nurse's responsibilities and limitations. This course requires a final grade of "C" or better.

## NURS 240 Nursing Care of Adults 2

4.5 credit hours, 9.5 contact hours (Lecture: 2; Lab: 7.5); Semesters Offered: Fall, Spring.

Prerequisite: Minimum grade of C in NURS 177, NURS 178, and NURS 180, and previous or concurrent enrollment in NURS 228; Permission of the Dean. Additional Cost: $\$ 13.00$.

This course focuses on the theoretical and clinical application of concepts, principles, and skills needed for identifying and meeting diverse adult medical-surgical client care needs. Emphasis is placed on the theoretical knowledge of the nurse's role in caring for those adults experiencing complex and chronic problems including: medical and surgical interventions, holistic care before, during, and after medical or surgical interventions, and health promotion, education, and maintenance in relation to complex and chronic health problems. This course requires a final grade of "C" or better.

## NURS 241 Nursing Care of Adults 3

4.5 credit hours, 9.5 contact hours (Lecture: 2; Lab: 7.5); Semesters Offered: Fall, Spring.

Prerequisite: Minimum grade of C in NURS 201, NURS 228, and NURS 240, and previous or concurrent enrollment in NURS 212; Permission of the Dean. Additional Cost: $\$ 13.00$.

This course focuses on the theoretical and clinical application of concepts, principles, and skills needed for identifying and meeting the needs of the diverse adult client experiencing multisystem and emergent health problems. Emphasis is placed on theoretical and clinical knowledge of the nurse's role in managing and caring for those adults experiencing multisystem and emergent health problems including: medical and surgical interventions, holistic care before, during, and after medical or surgical interventions, and health promotion, education, and maintenance in relation to multisystem and emergent health problems. This course requires a final grade of " $\mathbf{C}$ " or better.

## Office Administration

## OADM 137 Keyboarding

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall.
Prerequisite: None.
This course is for students with no previous typewriting or keyboarding experience. Students learn to operate a standard keyboard (including 10-key pad)

## OADM 138 Formatting

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall.
Prerequisite: Keyboarding competency or minimum grade of C in OADM 137.
Students will format a variety of personal and business documents such as letters, reports, memos, and tables. The course is designed to develop a minimum keyboarding skill of 30 words per minute.

## OADM 142 Intermediate Keyboarding

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Keyboarding and formatting competency; minimum grade of C in OADM 138 or ISYS 110; concurrent enrollment allowed in ISYS 110.

This is a course for students with previous training but without sufficient skill for advanced work. Intensive skill building, training in job competencies, proofreading, basic office typing problems, advanced project preparation, and fundamentals needed in office employment are included. Prepares the student for Microsoft Office Specialist certification.

## Physical Education

## PHED 101 Physical Education Activity

1 credit hour, 2 contact hours (Lecture: 0; Lab: 2); Semesters Offered: Fall, Spring, Summer.
Prerequisite: None.
Designed to develop basic skills, improve physical conditioning, teach rules, tactics, and values of the particular activity involved. All of the individual and team sport activities offered are taught on a beginning basis. Activities include: archery, golf, tennis, weight training, bowling, volleyball, swimming, badminton, softball, handball, canoeing, windsurfing, downhill skiing, cross-country skiing, jogging, aerobic dance, step aerobics, racquetball, bicycling, sport walking, distance running, strength training, Tae Kwon Do, and Kickboxing.

## PHED 103 Life Wellness

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall, Spring, Summer. Prerequisite: None.

Designed to teach the skills necessary to obtain a healthy lifestyle. Physical assessment, the elements of wellness, substance abuse, and an introduction to some form of physical activity are included in the course.

## PHED 111 Introduction to Coaching

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: None.

This course prepares the student to accept coaching responsibilities at elementary, secondary, and collegiate levels. It presents the student with a variety of coaching creeds from which he will develop a logical coaching philosophy and gives practical experience in budgeting and scheduling.

## PHED 210 Organization and Administration of Sports

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.

Historical growth, present status, and the trends in sports programming. Exploring the sports industry management fundamentals, organizational theories, and development of resources. Students will become acquainted with the skills, techniques, ideas, and facts necessary to efficiently organize and administer a sports program at any school level.

## PHED 215 Introduction to Recreation

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.
This course offers an introductory analysis of the philosophical, economic, political, social, and psychological impacts of recreation and sport. The course also offers a contemporary analysis of trends in recreational/sport.

## PHED 280 Practicum

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 0; Lab: 1 to 4); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Permission of program advisor.

A practical field experience in recreation/sport. Enrollment by department approval and acceptance of practicum proposal. Students enroll in 1 to 4 credits ( $75-300$ clock hours to meet course requirements) and are given letter grades based on a review of their employment and a comprehensive presentation to the program advisor. This is a practicum and therefore requires a final grade of "C" or better.

## Philosophy

## PHIL 101 Intro to Philosophical Thought

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

An introduction to the basic divisions of the philosophical discipline. The emphasis is upon the study of epistemology and metaphysics; tracing the historical progression of Western thought and comparing major philosophical systems of the West with those of the Non-Western world.

## PHIL 201 Introduction to World Religion

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
An introduction to Buddhism, Hinduism, Islam, and Judaism as well as a study of the religions of China, Japan, and the indigenous peoples. This course will assist the student to understand the historical development of these religions and the basic presuppositions including ultimate reality, world view, paths to liberation, and ethics.

## PHIL 210 Introduction to Ethics

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.

This course serves as an introduction to the study of ethics. Students will read classic texts from the history of ethics: Plato, Aristotle, Hume, Mill, Kant, and Freud. Students will apply ethical theory and moral reasoning to contemporary issues in business, politics, the environment, and/or the health care industry. Students personally will confront the tension between "living the good life" and "living a life in which there is goodness."

## PHIL 220 Introduction to Logic

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103W.

This course is designed to help students to increase their ability to analyze and critically evaluate arguments in ordinary language from a logical point of view. This involves both learning the logical principles which underlie good reasoning and becoming skilled in applying those principles to arguments which are expressed in everyday English.

## PHIL 280 Biomedical Ethics

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

Bioethics is the philosophical study of the ethical controversies brought about by advances in biology and medicine. Bioethicists are concerned with the ethical questions that arise in the relationships among life sciences, biotechnology, medicine, politics, law, philosophy, and theology. This course explores ethical issues arising in medicine, nursing and other health care professions. Issues include truth-telling and confidentiality, informed consent, fetal versus maternal rights, euthanasia, the treatment of AIDS, genetic testing and engineering, scarce medical resources, and social health care policy.

## PHIL 299 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1-4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Permission of Department chairperson or the Dean.

This course is for students who have completed all available courses in this subject area or who have a special interest in this subject area outside of the regular curriculum.

## Physics

## PHYS 101 Introductory Physics 1

5 credit hours, 6 contact hours (Lecture: 4; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in MATH 130 or satisfactory test score.

A non-calculus based college physics course providing an overview of basic principles of kinematics, dynamics, work and energy, rotational dynamics, fluids, heat, thermodynamics, and mechanical waves. Not recommended for engineering or physics majors.

## PHYS 102 Introductory Physics 2

5 credit hours, 6 contact hours (Lecture: 4; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in PHYS 101.

A non-calculus based college physics course providing an overview of basic principles of static and dynamic electricity and magnetism, D.C. and A.C. circuits, electromagnetic waves, reflection and refraction of light, interference and diffraction of light, relativity, and an introduction to modern physics. Not recommended for engineering or physics majors.

## PHYS 104 Technical Physics/Mechanics/Hydraulics and Pneumatics

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

This course consists of lectures and laboratory work in the basic laws of physics with an emphasis on hydraulic and pneumatic principles in an industrial environment.

## PHYS 201 General Physics 1

5 credit hours, 6 contact hours (Lecture: 4; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in MATH 141.
A calculus based physics course providing an introduction to the principles of kinematics, dynamics, work and energy, rotational dynamics, fluids, heat, thermodynamics, and mechanical waves. Emphasizes problem-solving methods. Recommended for engineering and physics majors.

## PHYS 202 General Physics 2

5 credit hours, 6 contact hours (Lecture: 4; Lab: 2); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in PHYS 201.
A calculus based physics course providing an introduction to the principles of static and dynamic electricity and magnetism, D.C. and A.C. circuits, electromagnetic waves, reflection and refraction of light, interference and diffraction of light, relativity, and an introduction to modern physics. Emphasizes problem-solving methods. Recommended for engineering and physics majors.

## Political Science

## POSC 201 American Government

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring. Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

A study of how the American political system operates, focusing on governmental policy areas, the enacting of laws and citizen influence, and related current events.

## Psychology

## PSYC 101 General Psychology

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This is the first course in the study of individual human behavior. Subjects addressed include: learning, development, the scientific method, personality, mental health, perception, emotion, and motivation.

## PSYC 102 Psychology of Adjustment

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in PSYC 101.

An exploration of the principles of psychology applied to the individual's adjustment to the stress of normal living and the fulfillment of potentials.

## PSYC 180 Social Psychology

3 credit hours, 3 contact hours (Lecture 3; Lab 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Social psychology is the scientific study of how individuals think, influence, and relate to one another. The goal of this course is to introduce students to the fundamental theories and research methods prevalent within the field of social psychology, the branch of psychology concerned with the origin of social interactions, as well as their effects on the individual. Topics explored in this course include, but are not limited to: social cognition, attitudes, conformity, altruism and prosocial behavior, stereotyping and prejudice, conflict and aggression, persuasion and power, obedience and group dynamics, decision making, social identity, and self-concept formation.

## PSYC 205 Child Psychology

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
A study of psychological principles as they apply to the family and the implications on personality development, child growth and development, attitudes, and other important aspects of child rearing.

## PSYC 215 Organizational Psychology

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.
An introductory course for business and technical students. Basic psychological principles and concepts are taught, as well as how they apply to work situations such as job satisfaction, interpersonal relations, mental health factors, group dynamics, and decision making.

## PSYC 260 Abnormal Psychology

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in PSYC 101.
This course is designed for students interested in pursuing careers in psychology, social work, or psychiatric nursing. The course will provide an overview of abnormal psychology including clinical assessment, diagnosis, disorders, and treatment.

## PSYC 296 Educational Psychology

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in PSYC 101.
It is designed to acquaint the student with the study and application of psychological concepts and principles as they relate to the teaching and learning process, classroom management, educational goals and objectives, measurement and evaluation, and diversity awareness.

## PSYC 299 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1 to 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Permission of the Dean.

This course is designed for students who have completed all available courses in this subject area or who have a special interest in this subject area outside of the regular curriculum.

## Science Education

## SCIE 190 Earth Science for Elementary Educators

3 credit hours, 5 contact hours (Lecture: 2; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

A laboratory-based course specifically designed for prospective elementary teachers. The objectives of the course are to aid students in developing meaningful and functional understanding of key earth science concepts and their interrelations; to provide students with open-ended problem solving environments that facilitate insight in the nature of science as an intellectual activity; to explore alternate conceptions of scientific phenomena; to help students develop more positive attitudes about science; and increase their confidence in their ability to do science.

## Speech Language Pathology

## SLP 110 Introduction to Speech Language Pathology

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Introduction to behavioral and social aspects of communication, with emphasis on development, adult, adult functions, and cultural differences, in addition to disorders. Also examines general approaches to rehabilitation of the communicatively disabled and current controversies.

## Sociology

## SOCI 201 Principles of Sociology

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
An introduction to the scientific study of human society and social interactions. The course covers basic principles of social structure and process with an analysis of culture, socialization, status, role, stratification, and social change.

## SOCI 202 Social Problems

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in SOCI 201.

Examines the societal framework within which problems arise. The use of scientific inquiry and a consideration of the problems in analyzing social science data in the investigation of representative social problems such as poverty, racism, crime, pollution, and alienation are stressed.

## SOCI 203 Marriage and Family

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Provides an introduction to the sociological and social psychological factors in marriage. The course includes topics such as partner selection, changing marriage patterns, sex roles, and conflict within the modern family structure.

## SOCI 240 Minority Groups in America

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 103 or ENGL 103 W .

Traces the history of several minority groups in the United States and analyzes their current demographic, economic, and social situations. Minority/Dominant relationships are examined. Emphasis is placed on the study of prejudice and discrimination.

## SOCI 248 American Indian Studies and Policy

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring of even years.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This omnibus course discusses dimensions of Native American identity as delineated through demography and history, society and culture, religion and education, and politics and economics. Particular attention is given to interpreting Native sovereignty and self-governance as developed in relationship with U.S. national and state authorities. To close, the class will undertake comparative analysis, referencing the indigenous peoples of Alaska and Hawaii, Latin America, and across the world.

## SOCI 299 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1 to 4; Lab: 0); Semesters Offered: Variable. Prerequisite: Permission of the Dean.

This course is designed for students who have completed all available courses in this subject area or who have a special interest in this subject area outside of the regular curriculum.

## Social Work

## SOWK 100 Introduction to Social Work

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring.
Prerequisite: None.

An introduction to the field of Social Work with its diverse settings, client populations, and activities as a career choice. This course provides a brief history of the Social Work profession, and then presents an overview of the settings, methods, values, and characteristics of the Social Work profession. It includes social work knowledge, skills, and value base. This course will contain a component of service learning to acquaint the student with field experience. Emphasis is placed on class discussion and current events.

## SOWK 120 Social Work/Interview Skills

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in SPEE 102.

This course is an introduction to the types, purposes, and stages of interviewing. Basic empathy skills will be covered. Skills in observation, listening, non-verbal communication, rapport-building, information giving, and information gathering will be taught. Basic training in recording and documentation will be reviewed. There will be an emphasis on working with culturally diverse, oppressed, or maladaptive clients.

## SOWK 200 Introduction to Social Welfare

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in SOWK 100 and SOWK 120.
The main focus of this course is to give students an understanding of the emergence of the institution of social welfare by tracing its historical roots. This course will explore the historical development of social welfare in the Old and New Worlds. Social welfare policies and programs within the United States will be reviewed along with a discussion of the values underlying the existing systems.

## SOWK 205 Theories and Methods of Practice 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in SOWK 100 and SOWK 120.

This course is devoted to theories, methods, and values of social work practice. The main focus of this course is on the direct service roles and generalist roles for entry level into the practice. Various theoretical models will be covered in this course. The primary focus will be on individuals and families. A variety of interventions will be addressed that deal with the psychosocial issues faced by the client.

## SOWK 240 Field Experience

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in SOWK 100 and SOWK 120; and completion of 45 credit hours including specific SOWK courses; and recommendation of the program advisor.

This is a capstone course in which the student searches independently, with assistance from the program advisor, for a human services agency in which he/she will be placed to complete 96 hours ( 48 hours per credit) observing the social services roles, assisting in service delivery under close supervision, and exploring career interests and aptitude. The student will be placed, supervised, and evaluated under the direction of a college staff member. Students will prepare for a program interview with the program advisor and Advisory Board. The student is asked to meet with the program advisor prior to registering for this course. This is a capstone course and therefore requires a final grade of " $\mathbf{C}$ " or better.

## Spanish

## SPAN 101 Elementary Spanish 1

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall.
Prerequisite: None.

Designed as the first class in a series of courses for students who want to learn to speak Spanish and who are considering further language instruction at a four-year institution. Presents the fundamentals of pronunciation and basic grammar structure.

## SPAN 102 Elementary Spanish 2

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in SPAN 101 or one year of high school Spanish.
The second class in a series of courses designed for students who want to learn to speak Spanish and who are considering further language instruction at a four-year institution. Provides a continued emphasis on the spoken language and reading of graded materials in Spanish for comprehension without translation. Requires extensive use of spoken Spanish in the classroom.

## SPAN 199 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1 to 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Permission of Department Chairperson or Dean.

This course is designed for students who have completed all available courses in this subject area of who have a special interest in this subject outside of the regular curriculum.

## SPAN 201 Intermediate Spanish 1

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in SPAN 102 or three years of high school Spanish.
The third class in a series of courses designed for students who want to learn to speak Spanish and who are considering further language instruction at a four-year institution. Reviews and applies essential principles of Spanish grammar structure and training in idiomatic usage through oral and written exercises; intensive practice of the spoken language and reading of Spanish texts.

## SPAN 202 Intermediate Spanish 2

4 credit hours, 4 contact hours (Lecture: 4; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in SPAN 201 or four years of high school Spanish.

The fourth class in a series of courses designed for students who want to learn to speak Spanish and who are considering further language instruction at a four-year institution. Reviews and applies essential principles of Spanish grammar structure and training in idiomatic usage through oral and written exercises; intensive practice of the spoken language and reading of Spanish texts.

## SPAN 299 Directed Study

1 to 4 credit hours, 1 to 4 contact hours (Lecture: 1 to 4; Lab: 0); Semesters Offered: Variable.
Prerequisite: Permission of Department Chairperson or Dean.

This course is designed for students who have completed all available courses in this subject area of who have a special interest in this subject outside of the regular curriculum.

## Speech

## SPEE 102 Fundamentals of Public Speaking

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: None.

Develops the skills and confidence necessary to speak effectively in public. Emphasis is on principles and techniques of audience analysis, research, development, organization, and delivery of informative and persuasive speeches. Students apply principles in classroom exercises and speeches.

## SPEE 104 Introduction to Human Communication

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Fall, Spring, Summer.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Surveys and examines the communication process in interpersonal, small-group, and organizational settings. The course includes listening and interviewing skills, as well as nonverbal, gender, and inter-cultural communication. Students utilize principles learned in classroom exercises.

## Theatre

## THEA 110 Theatre Appreciation

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.

An introductory course in theatre designed for the non-theatre major. Students will develop an appreciation and enjoyment of the dramatic arts. This survey of theatrical history, principles, and practices includes units on theory, performance, terminology, production, and technical aspects. Students will have the opportunity to become familiar with theatre through hands-on experience, video/film, and reading/performing plays.

## THEA 150 Applied Theatre

0.5 to 3.0 credit hours, 0.5 to 3.0 contact hours (Lecture: 0.5 to 3.0; Lab: 0); Semesters Offered: Variable.

Prerequisite: None.
Provides variable credit for supervised experience involving one or more aspects of theatrical expression/production through college theatre productions. The nature of involvement is to be determined between the instructor and student. No more than 6 credits may be applied towards graduation requirements.

## THEA 180 Play Production

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
Introduces the student to the fundamentals of play production. This course explores the technical aspects involved in performance arts events. Students will work with all production elements including set design, lighting, costume design, makeup, and publicity.

## THEA 181 Acting 1

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.

Instructs the basic principles for the actor: movement and relaxation exercises, vocal technique, improvisation, character analysis, and development. Specific attention will be devoted to auditioning techniques and ensemble performance.

## THEA 184 Acting 2

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in THEA 181.
Builds on the knowledge and skills acquired in THEA 181, concentrating on period style acting techniques. Students will be exposed to stage combat, poetry, sonnets, and classic theatrical pieces. Students will learn about scoring, scansion, and interruption of classic works. Students will do intensive work in movement, voice, and diction.

## THEA 185 Improvisation

3 credit hours, 3 contact hours (Lecture: 3; Lab: 0); Semesters Offered: Variable.
Prerequisite: None.
Techniques of improvisational performing for the beginning actor. This course includes spontaneous and planned exercises to evoke and inspire the actor's capacity for inventive imagination and sense of ensemble. Emphasis is placed on scene development, monologues, and storytelling.

## THEA 210 Musical Theatre Workshop

1 credit hour, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Variable.
Prerequisite: Audition required.
Study of Musical theatre role preparation and styles, particularly developing the skills necessary to approach and prepare roles for musical theatre. Acting, movement, singing, musical preparation, and coordination of the above elements are included.

## THEA 220 Stagecraft

3 credit hours, 4 contact hours (Lecture: 2; Lab: 2); Semesters Offered: Variable.
Prerequisite: Minimum grade of C in ENGL 115 or satisfactory test score; concurrent enrollment allowed.
This is an introduction to theatre arts of design, acting, direction, and business through laboratory experience mixed with lecture. Students will work on construction and operating crews, handle business details under supervision, and generally participate in the operation of college theatre.

## Welding Technology

## WELD 159 Basic Welding

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall, Spring.
Prerequisite: Minimum grade of C in MATH 098 or satisfactory test score, concurrent enrollment allowed. Additional Cost: $\$ 42.00$.

This course is a survey of the hands on application of the oxy/acetylene and plasma cutting processes; the shielded metal arc, gas metal arc, and gas tungsten arc welding processes.

## WELD 168 AWS Welder Certification Preparation

2 credit hours, 4 contact hours (Lecture: 1; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in WELD 159; WELD 169 or WELD 175 or WELD 180; WELD 265; WELD 279, concurrent enrollment allowed. Additional Cost: $\$ 42.00$.

This course will administer the written examinations and performance testing in accordance with requirements of AWS SENSE QC10 and AWS EG2.0, for each student's choice of welding process. All individuals that meet the specified performance criteria will be awarded an AWS SENSE Program Welder certification. The successful completion of this course does not necessarily result in AWS (American Welding Society) Certification. AWS Welder certification is dependent upon written test scores and weld/layout conformance of the workmanship sample, per desired process. AWS welder certification is independent of the letter grade received in this course. All students who achieve certification are individually responsible for the $\$ 15.00$ processing fee, paid directly to the American Welding Society. Students seeking multiple process specific certifications may enroll for this course multiple times with the recommendation of the program advisor.

## WELD 169 GMAW/MIG Welding

4 credit hours, 6 contact hours (Lecture: 2; Lab: 4); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in WELD 159, concurrent enrollment allowed. Additional Cost: $\$ 42.00$.

This course covers the application of the Gas Metal Arc Welding, both Short Circuit and Axial Spray Transfer process for different joints in all positions on carbon steel, as well as pulsed and pulse on pulse aluminum welding.

## WELD 170 Industrial Welding

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in WELD 159, concurrent enrollment allowed. Additional Cost: $\$ 42.00$.

This course covers the application of the welding processes used in industry and manufacturing with an emphasis on the flux cored arc welding process on heavy plate in all positions.

## WELD 175 GTAW/TIG Welding

4 credit hours, 6 contact hours (Lecture: 2; Lab: 4); Semesters Offered: Fall.
Prerequisite: Minimum grade of C in WELD 159, concurrent enrollment allowed. Additional Cost: $\$ 42.00$.
This course covers the application of the gas tungsten arc welding process for different joints in all positions. Includes welding of non-ferrous metals using both regular and pulsed current.

## WELD 180 SMAW/STICK Welding

4 credit hours, 6 contact hours (Lecture: 2; Lab: 4); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in WELD 159, concurrent enrollment allowed. Additional Cost: $\$ 42.00$.

This course covers the application of SMAW Shielded Metal Arc Welding processes in all positions with multiple electrode classes and polarities.

## WELD 235 Metallurgy for Welders

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: $\$ 42.00$.
Provides welders with an understanding that special attention is needed when welding certain types of metal. Recognition of different metal types and welding techniques involved will be covered.

## WELD 265 Thermal Cutting Processes

2 credit hours, 3 contact hours (Lecture: 1; Lab: 2); Semesters Offered: Fall.
Prerequisite: None. Additional Cost: $\$ 42.00$.
This course will cover an in-depth study, and hands on practice of Oxy-Fuel, Plasma, and Air Carbon Arc cutting, gouging, and scarfing.

## WELD 277 Welding Fabrication and Maintenance Repair

2 credit hours, 4 contact hours (Lecture: 1; Lab: 3); Semesters Offered: Spring.
Prerequisite: Minimum grade of C WELD 159, WELD 169; WELD 180, concurrent enrollment allowed. Additional Cost: $\$ 42.00$

This course will cover the fundamentals of layout and fabrication from a blueprint, cost estimation, and material selection. It will also outline the maintenance repair process and provide hands on use of these skills.

## WELD 279 Welding and Inspection

2 credit hours, 2 contact hours (Lecture: 2; Lab: 0); Semesters Offered: Spring.
Prerequisite: Minimum grade of C in WELD 159, concurrent enrollment allowed.

This course provides the fundamental principles of weld testing and inspection. Proper procedures of destructive and nondestructive testing of welds along with knowledge of codes and standards are studied.

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Southwestern Michigan College is accredited by the Higher Leaming Commission (hlcommission.org), a regional accreditation agency recognized by the U.S.

Department of Education.


[^0]:    ${ }^{2}$ BUSI 208 (Business Law 2) is a required course for some four-year institutions. Consult with an advisor and the transfer requirements of the four-year institution.

