MESSAGE FROM THE PRESIDENT

Welcome to Mid Michigan Community College (MMCC). We are pleased to provide this catalog of our offerings and the many ways in which you can, “Get More at Mid.”

For more than 50 years, MMCC has given its students and its communities more opportunities for growth and advancement. At Mid, you will find a faculty and staff dedicated to your success in the classroom and on the job. You will find the knowledge and skills that will help you take your next steps on a pathway to lifelong learning. You will find academic support services to reinforce classroom learning. You will find student organizations that enrich your college experience. And you will find a caring community where you will make more friends and have more new adventures.

Academic programs at MMCC are laid out as guided pathways. Each pathway provides a recommended set of courses that, when followed, will enable you to smoothly and efficiently complete your degree. Completing your certificate or degree is a significant milestone in your career. A college degree or professional credential often makes the difference in who is hired and how much is earned in today’s workforce.

I look forward to meeting you in person, to learning about your interests and aspirations, and to shaking your hand as you cross the stage at commencement.

LOCATIONS

Founded in 1965, Mid Michigan Community College has a long history of serving the central Michigan area, and is located in the center of Michigan’s lower peninsula. Each of MMCC’s two campuses have unique features. The Harrison campus is situated on 560 wooded acres and offers year round recreational opportunities along with the majority of the college’s technical program labs. The Mt. Pleasant location is the newest of MMCC’s facilities and houses state-of-the-art skills labs, as well as general academic programming and a technical trades center.

The communities surrounding MMCC offer a full range of outdoor recreational activities and a variety of cultural offerings. From boating to mountain biking, heritage events to vibrant festivals, and downtown shopping to quaint road side stands, our communities feel like home.

The contents of this catalog are subject to change; therefore, it cannot be considered a contract or agreement between an individual and Mid Michigan Community College or its administrators. Published May 2017.

For the most current information go to our website at midmich.edu/catalog.
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1375 S. Clare Ave., Harrison MI 48625
(989) 386-6622

MT. PLEASANT CAMPUS
2600 S. Summerton Rd., Mt. Pleasant, MI 48858
(989) 773-6622

ACADEMIC SERVICES
Dean of Health Sciences ........................................... 386-6645..........................HC Room 268
Dean of Liberal Arts .................................................. 386-6622, ext. 230.............HC Room 268
Dean of Math & Science ........................................... 773-6622, ext. 129 .............MP Room 115
Computer Labs Office - Harrison ......................... 386-6653.......................... HC Room 290
Computer Labs Office - Mt. Pleasant .................... 317-4630.......................... MP Room 103
Customized Training .............................................. 386-6629.......................... HC Tech Center
Faculty Secretary ................................................. 386-6667.......................... HC Room 252
Health Science Programs ...................................... 386-6643.......................... HC Room E-243
Off Campus Programs ............................................ 386-6631.......................... HC Room 252A
Vice President of Academic Services ..................... 386-6607.......................... HC Room 206

STUDENT SERVICES
Academic Advising ................................................. 773-6622, ext. 100...............MP Room 156
Admissions .............................................................. 386-6661.......................... HC Room 104
Bookstore - Harrison .............................................. 386-6640.......................... HC Room 215
Bookstore - Mt. Pleasant ........................................ 317-4620.......................... MP Room 152
Cashier ................................................................. 386-6611.......................... HC 1st Floor - SOAR
Diploma/Transcript Evaluations ......................... 386-6622, ext. 395...............HC Room 104
Executive Dean of Student and
Academic Support Services ..................................... 773-6622, ext. 236.............HC Room 111
Enrollment/Records - Harrison ......................... 386-6659.......................... HC Room 104
Enrollment/Records - Mt. Pleasant ...................... 773-6622, ext. 241/221...........MP Room 156
Financial Aid ......................................................... 386-6664.......................... HC Room 114
Help Desk .............................................................. 317-4630 or 411 ...................MP CLAB Room 318
Internship and Student Placement ...................... 386-6629.......................... HC Tech Center
Library Learning Services (LLS) - Harrison .......... 386-6638.......................... HC Room 219
Library Learning Services (LLS) - Mt. Pleasant ..... 773-6622, ext. 287...............MP Room 168
Library/Media Center ............................................. 386-6617.......................... HC Library
Mentors ................................................................. 386-6622, Ext. 544 ...............HC Room 114/MP Rooms 159-161
Office of the President ........................................... 386-6601.......................... HC Administration
Personnel Services ................................................ 386-6621.......................... HC Room 120
Registrar .............................................................. 773-6622, ext. 230 ..............MP Room 173
Student Life .......................................................... 386-6634.......................... HC Room 219/MP Room 238
Testing Center - Harrison ...................................... 386-6677.......................... HC Library
Testing Center - Mt. Pleasant ................................ 773-6622, ext. 287.............MP CLAB Room 168
Veterans Resource Rep ...................................... 773-6622, ext. 147 ...............HC Room 121/MP Room 306

COLLEGE FAX NUMBERS
Administration ................................................. (989) 386-9088
Bookstore - Mt. Pleasant ................................. (989) 317-4628
Bookstore - Harrison ........................................ (989) 386-8443
Mt. Pleasant Campus ....................................... (989) 772-2386
Personnel Services ............................................ (989) 317-4631
Tech Center - Harrison ...................................... (989) 802-0971
Health Sciences ............................................... (989) 386-6666
Harrison Campus .............................................. (989) 386-6613
ACADEMIC CALENDAR

(Schedule Subject to Change)

Fall Semester 2017
Classes Begin......................................................... August 26
Labor Day/No Classes ............................................. September 4
College In-Service/No Classes ..................... November 22
Thanksgiving Break/No Classes ................. November 23-26
Classes End .......................................................... December 15

Winter Semester 2018
Classes Begin......................................................... January 6
Spring Break ........................................................ March 3-11
College In-Service/No Classes ..................... March 28
Good Friday/No Classes ..................................... March 30
Classes End ........................................................ May 4
Commencement .................................................... May 5

Spring Semester 2018
Classes Begin......................................................... May 14
Memorial Day/No Classes ................................... May 28
Independence Day /No Classes .................. July 4
8-Week Classes End ............................................. July 6
12-Week Classes End ........................................... August 3

ADMISSIONS

“OPEN DOOR” ADMISSIONS POLICY
Mid Michigan Community College has an “open door” admissions policy which encourages admissions of all persons who have a sincere desire to study and apply themselves to gain full advantage of the benefits that the College has to offer. Persons planning to transfer to four-year colleges or universities should be aware that a high school diploma or GED may be required by the transfer institution. Persons applying for financial aid must have a high school diploma or GED.

HOW TO APPLY
Students should apply well in advance of their anticipated start date to allow time for assessment, academic advising, and class registration. As soon as you have applied for admission at MMCC, you will be connected with one of our Mid Mentors. As your single-point-of-contact, your mentor can assist you with everything from financial aid to registering for classes.

First-time, Returning, and Transfer Applicants
1. Complete and submit a General Admissions Application online at apply.midmich.edu.
2. Get your Financial Aid in order. If you haven’t yet, you should begin this process. It takes a minimum of a few weeks to process financial aid for new students. File your FAFSA (Free Application for Federal Student Aid) online at www.fafsa.ed.gov to determine your eligibility for grants, loans, scholarships, and work study. Questions about Financial Aid? Call us at 989.386.6664 or visit our Financial Aid Department.
3. Set up your MidMich Email and Online Account. You should set up your MMCC online Portal account. Some College departments will begin sending you important information right away. This is your college email and will be used for all college communication. Having trouble with your account? Contact the MMCC Help Desk at helpdesk@midmich.edu or by calling (989) 317-4630.
4. Send us your Transcripts & SAT/ACT Scores. If you’ve graduated from high school within three years, send us your high school transcripts and standardized test scores. If you’ve attended other colleges, have your college transcripts sent to us as well. If it’s been longer than three years since you’ve graduated, you may need to complete additional placement testing.
5. Attend Orientation. All incoming students must attend an orientation. At orientation, you will connect with other students, learn success skills, and meet with your College support team. You will also be able to meet with an Academic Advisor who will help you schedule and register for your classes. If orientations are currently open for the semester in which you’re planning to register, you can RSVP at midmich.edu/orientation.
Guest Applicants

1. Complete and submit a Guest Student Application online at apply.midmich.edu.
2. Set up your MidMich Email and Online Account. You should set up your MMCC online Portal account. Some College departments will begin sending you important information right away. This is your college email and will be used for all college communication. Having trouble with your account? Contact the MMCC Help Desk at helpdesk@midmich.edu or by calling (989) 317-4630.
3. Verify you’ve met Course Prerequisites. Several courses at MMCC have prerequisites that must be satisfied prior to enrollment in the course. Often times Guest Students have satisfied prerequisites at their "home" college/university. However, colleges/universities do not generally share prerequisite information with one another.
4. Complete additional placement testing if necessary. Appropriate placement in courses promotes student success and allows us to assist students in selecting courses that align with their skill levels. Your Mid Mentor can help you determine what you need to submit or what testing needs to be completed before you register for classes.
5. Arrange Payment. Students who register prior to the full tuition due date will be expected to pay the Enrollment Fee upon registration. Remember that Guest Students are not eligible for financial aid through MMCC. The federal government will only allow you to apply for financial aid through one school per semester and that should be your home school where you are earning the bulk of your credits.
6. Register Online or In-Person. Visit either campus’ registration clerk to register in-person or register online, via MMCC’s Portal and use MidWeb.

Military Veteran Applicants

1. Complete and submit a General Admissions Application online at apply.midmich.edu.
2. Get your Financial Aid and VA Documentation in order. Beyond veterans benefits, you may be eligible for other forms of federal financial aid. File your FAFSA (Free Application for Federal Student Aid) online at www.fafsa.ed.gov to determine your eligibility. File soon. It takes a minimum of a few weeks to process financial aid for new students. MMCC’s School Code is 006768. Questions about paying for college? Call Financial Aid at 989.386.6664, email finaid@midmich.edu, or visit our Financial Aid Department.
3. Set up your MidMich Email and Online Account. You should set up your MMCC online Portal account. Some College departments will begin sending you important information right away. This is your college email and will be used for all college communication. Having trouble with your account? Contact the MMCC Help Desk at helpdesk@midmich.edu or by calling (989) 317-4630.
4. Send us your Transcripts & SAT/ACT Scores. If you’ve graduated from high school within three years, send us your high school transcripts and standardized test scores. If you’ve attended other colleges, have your college transcripts sent to us as well. If it’s been longer than three years since you’ve graduated, you may need to complete additional placement testing.
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International Applicants

1. Complete and submit an International Student Application online at apply.midmich.edu. Please take care to supply your name exactly as it is printed on your passport.
2. Connect with MMCC’s International Support Services Team to complete all necessary forms and financial aid requirements. Questions can be directed to 989.773.6622 extension 258 or international@midmich.edu
3. English translations of a high school diploma/transcript and/or all college diplomas/transcripts. English translations can be obtained through World Education Services (WES).
4. Send us your Transcripts & SAT/ACT Scores. If you’ve graduated from high school within three years, send us your high school transcripts and standardized test scores. If you’ve attended other colleges, have your college transcripts sent to us as well. If it’s been longer than three years since you’ve graduated, you may need to complete additional placement testing.
5. Financial aid verification form (a minimum of 500 on paper-based tests, 173 on computer-based tests, or 61 for internet-based tests) or an ELS score of 109 or IELTS of 5.0. Applicants not meeting any of these criteria can still be considered for admission and will be required to take courses in MMCC’s LUCES Academy (contact MMCC’s international advisor for more details).
6. An appropriate TOEFL score (a minimum of 500 on paper-based tests, 173 on computer-based tests, or 61 for internet-based tests) or an ELS score of 109 or IELTS of 5.0. Applicants not meeting any of these criteria can still be considered for admission and will be required to take courses in MMCC’s LUCES Academy (contact MMCC’s international advisor for more details).

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5. A financial statement verifying financial resources sufficient to cover $19,247 USD for each year to cover expenses. Bank statements, affidavits of sponsorship, etcetera should be supplied to support the financial statement. If an applicant has made arrangements to reside with a friend or relative while attending the college, and can provide a signed Financial Support Form (PDF, updated FEB 2017) from this sponsor, financial verification limits may be reduced to $17,541. It’s very important for students & sponsors to fulfill financial aid requirements. Questions can be directed to 989.773.6622 extension 258 or international@midmich.edu
6. An appropriate TOEFL score (a minimum of 500 on paper-based tests, 173 on computer-based tests, or 61 for internet-based tests) or an ELS score of 109 or IELTS of 5.0. Applicants not meeting any of these criteria can still be considered for admission and will be required to take courses in MMCC’s LUCES Academy (contact MMCC’s international advisor for more details).

If you have questions about paying for college? Call Financial Aid at 989.386.6664, email finaid@midmich.edu, or visit our Financial Aid Department.
7. International Students Transfer Form (PDF, updated FEB 2017)

8. Proof of health insurance coverage. If a student is interested in purchasing health insurance for approximately $500 per year, this can be done by contacting HTH Worldwide or Specialty Risk International, Inc. Please note that these are simply health coverage options and MMCC has no affiliation with or endorsement for the policies offered through these providers.

9. Attend International Students Orientation. All incoming international students must attend orientation. At orientation, you will connect with other students, learn success skills, and meet with your College support team.

Dual Enrollment Applicants

1. Complete and submit a Dual/Concurrent Enrollment Application online at apply.midmich.edu.

2. Contact your high school guidance counselor in order to move forward with enrollment in MMCC classes. Frequently, the high school pays most of the costs. You will need to ensure that you are working with your high school so that payment and enrollment in eligible courses occurs. Because the conditions for dual enrolling vary, your counselor will assist you in making course selections that align with your high school’s requirements. For home schooled students, contact us, and we’ll help you get started.

3. Complete the MMCC Dual Enrollment Registration Form (3/2017) with your high school counselor, and submit it to MMCC’s Admissions Department. Our Dual Enrollment Specialist will verify that you meet course placement and prerequisites standards, and once verified, enroll you in the course.

4. Review your enrollment packet that you will receive at the address we have on file. This packet will contain a copy of your schedule, along with important information including the courses and schedule for which you’ve registered, your MMCC Student ID#, how to set up your MMCC email, and how to purchase your text books. Additional information will include any remaining balance due, class locations, times, etc. This information is important. Make sure everything is correct and that you understand what it says.

5. Attend an orientation. For new students starting to dual enroll in a fall semester, attending a dual enrollment orientation is important! As a dual enrolled student, you are enrolling in college courses, and you’ll need to know what that entails, what to expect, and what consequences are attached if you don’t succeed. Orientation will be hands-on and fast-paced. At orientation, you will be able to buy books, get your student ID, set up your email and online accounts, meet other dual students, and get a campus tour.

Health Sciences Program Applications

All MMCC Health Sciences programs require a program-specific application in addition to a regular MMCC admission application.

- Nursing: All prerequisites must be completed prior to applying to the program.
- All other Health Sciences programs: Prerequisites may be completed during the semester in which you applied to the program.

In addition, all health career applicants are required to have a criminal background check including fingerprinting. By State law, students who have committed certain felonies and/or misdemeanors are NOT eligible for health care programs.

Students who are admitted to a Health Sciences program need to be aware that drug screens are required prior to entry into the program and/or clinicals depending on the program. Random drug screening may be done at any time during the program at the student’s expense.

The following programs have a limited enrollment: Medical Assistant, Magnetic Resonance Imaging, Nursing, Pharmacy Technician, Physical Therapist Assistant, and Radiography. Information regarding the program application process is available on our web site www.midmich.edu under Programs. For further information about any health program, contact the Health Sciences Department at 989-386-6643.

FINANCIAL AID

Harrison Campus:
Phone 989-386-6664 Fax: 989-386-6613

Mt. Pleasant Campus:
Phone 989-773-6622, ext. 224 Fax: 989-772-2386
Email: finaid@midmich.edu

The MMCC financial aid office encourages all students to apply for federal financial aid by completing the Free Application for Federal Student Aid (FAFSA). You may apply online at www.fafsa.gov. Approximately 75% of all MMCC students carrying 6 credits or more receive some form of financial assistance. Financial aid programs offer all students the opportunity to pursue their educational goals. MMCC, along with federal and state programs and private and civic organizations, offers a variety of scholarships, grants, loans, and employment opportunities to assist students in financing their education.

HOW TO APPLY FOR FINANCIAL AID

The Free Application for Federal Student Aid (FAFSA) is the first step in the financial aid process. This application can be submitted on the web at www.fafsa.gov. The paper FAFSA may be obtained online at www.federalstudentaid.ed.gov.
Once a student's financial aid has been completely processed they may charge their tuition, fees and books against eligible financial aid awards.

Students selected for verification may be required to submit documents to the MMCC Financial Aid Office. For those students, MMCC must compare the information from the FAFSA to the applicable tax forms and other required documents. Financial aid will not be awarded until all required documents are provided. If it is determined that additional documents are required, financial aid previously awarded may be cancelled. Falsification of income information submitted for the purpose of receiving financial assistance will result in cancellation of all future assistance and repayment of all previously awarded financial aid. If federal and/or state funds are involved, the appropriate government agencies will be notified including the U.S. Department of Education, Michigan Higher Education Assistance Authority, and/or the Office of Inspector General.

Students that are transferring to MMCC must add MMCC's school code, 006768, to their FAFSA at www.fafsa.gov. Students must renew their FAFSA each year. Contact the financial aid office for spring and summer semester eligibility.

ELIGIBILITY FOR FEDERAL & STATE FINANCIAL AID PROGRAMS

To be eligible for federal and state financial aid, employment and student loan programs, students must meet all of the following requirements:

- Be admitted to or enrolled as a regular student in a qualified academic program leading to a degree or certificate.
- Be a U.S. citizen or an eligible noncitizen.
- Most males must be registered with Selective Service. Go to www.sss.gov to determine if you are or were required to register between age 18 and 25.
- Students cannot be in default on a federal student loan or owe money back on a federal student grant.
- Students who are enrolling in higher education for the first time on or after July 1, 2012, must have either a high school diploma or recognized equivalent (such as a General Educational Development certificate (GED) or have been home schooled).

Meet the MMCC Financial Aid requirements

Make satisfactory academic progress.

- Meet any additional requirements for specific federal and state financial aid programs.
- Have financial need, except for some loan programs.
- Have a valid social security number.
- Complete and sign a Free Application for Federal Student Aid (FAFSA) stating that student financial aid will be used only to pay the cost of attending an institution of higher education.
- Cannot have a conviction for drug possession or sale while receiving financial aid.

HOW FINANCIAL NEED IS DETERMINED

Financial need is determined by subtracting a student’s Expected Family Contribution (EFC) from their MMCC cost of attendance budget. Additional information regarding MMCC’s cost of attendance and need based aid can be found on the Financial Aid page of college’s website at www.midmich.edu/finaid. MMCC must consider all sources of financial assistance and subtract the estimated amount of all assistance from the student’s estimated total financial need.

To determine a student’s eligibility for need-based assistance, MMCC must consider the student’s EFC. The EFC is calculated by the U.S. Department of Education from the information submitted in the student’s FAFSA. The EFC measures a family’s financial strength and determines the student’s eligibility for federal student aid. The MMCC financial aid office must use the EFC calculated by the U.S. Department of Education. However, when appropriate the MMCC financial aid office may make adjustments. Contact the MMCC financial aid office for more information.

FINANCIAL AID AWARDS AND PACKAGE

A student’s financial aid package may include all awards; scholarships, grants, work-study, and student loans. The awards are determined annually. The MMCC Financial Aid Office notifies students of the estimated financial aid that they are eligible for by mail or email. Financial aid awards are subject to change due to changes in the student’s enrollment, finances, or satisfactory academic progress. Changes in enrollment status, including a reduction of credit hours or withdrawing from all classes before the end of the semester may result in a reduction or cancellation of all financial aid. Students should check with the MMCC Financial Aid office before dropping classes. If a student or student’s family experiences a change in financial circumstances, the student may contact the MMCC financial aid office to determine if an adjustment may be made to the student’s FAFSA.

DISBURSEMENT OF FINANCIAL AID AWARDS

All financial aid funds, scholarships, grants, and student loans are credited to the student’s account. If the student has any remaining funds, a refund will be issued to the student for the balance. Students will receive their refund as a check, delivered through standard mail (5-10 business days after the refund is issued). It is the student’s responsibility to verify the accuracy of the billing charges and credits and remaining financial aid balance. Refunds for remaining financial aid are available approximately six to eight weeks after the semester starts. Students should plan their personal finances with this time frame in mind.
MMCC FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS POLICY (SAP)

All students receiving financial aid from federal and state sources at MMCC must meet satisfactory academic progress (SAP) standards. These standards are established to ensure that students are progressing toward an educational objective and are able to complete a degree within a maximum time frame (MTF). All academic grades are required to be calculated in the review, regardless if the student received aid. Academic grade records are reviewed for SAP at the end of each semester of enrollment (Fall, Winter, and Spring) or at the time, the FAFSA application is received if a SAP status has not previously been determined. Students without a prior SAP status who are not meeting the overall standards will go on a “Warning” or “Ineligible” status depending on the number of unsuccessful semesters on record. Students who are not meeting the SAP requirements are notified of their SAP status by means of their MMCC email account.

The standards of Satisfactory Academic Progress include the following components: Grade Point Average (GPA), Completion Rate and Maximum Time Frame measures.

GPA Measure

Students must maintain a minimum overall 2.0 GPA.

Completion Rate Measure

Students must complete 67% of all attempted credits (including transfer credits). The completion rate is calculated by dividing the number of completed credits by the number of attempted credits.

Maximum Time Frame (MTF)

Students may receive aid up to 150% of the credits required for graduation (refer to College Catalog for specific programs). For restricted programs such as nursing and radiology, eligibility is evaluated on the number of prerequisite classes until the student is officially admitted into the program.

Examples of Associate and Certificate Programs:

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<td>Associate in Arts (AA)</td>
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<tr>
<td>Certificate</td>
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</tbody>
</table>

Grades

All "F", "W", and "I" grades will be considered as credits attempted but not as completed. Also, if a student receives a grade of D- or higher in a class and repeats the course, the repeated credits will be counted as attempted but not completed. Transfer, ESL and remedial courses are counted as attempted and completed credits. Credit hours taken for an audit grade of "AU" are not included in determining enrollment status for financial aid disbursement or satisfactory academic progress.

Academic Amnesty

Financial aid regulations do not have a provision for academic forgiveness; therefore, all credits and grades removed for Academic Amnesty must be used to calculate financial aid SAP standards.

RESULTS OF SEMESTER SAP REVIEWS

Financial Aid Warning and Ineligibility

Students who are not meeting the minimum overall standards of SAP will be placed for the following semester on a status of “Warning.” During this semester, students may continue to receive federal and state financial aid. Students with a “Warning” status must seek additional services from an Academic Advisor to discuss issues related to their academic performance.

Students who have reached their Maximum Time Frame will not be eligible for a semester on “Warning.” They will lose their eligibility for Title IV funds unless they file a successful appeal. After the “Warning” semester, students who do not obtain the minimum SAP standards will become “Ineligible” to receive federal or state financial aid. Students who are unable to meet SAP are encouraged to make an appointment with an Academic Advisor.

Regaining Eligibility

Students may regain eligibility for financial aid by meeting the minimum SAP standards. Student must successfully complete the number of credits needed to obtain those standards without the use of federal or state financial aid.

Appeals for Ineligible Status

Students who become ineligible have the right to appeal for continued eligibility. Students must meet with an Academic Advisor to complete an Individual Academic Plan (IAP). The student must submit a complete Appeal Packet (IAP, SAP Appeal Form, appeal letter, and supporting documentation if available) to the Financial Aid Office. Students should clearly describe (1) the circumstances that occurred beyond their control that contributed to their failure to meet the minimum SAP standards and (2) what corrective action has been taken to prevent this from happening in the future.

Examples of situations considered beyond a person’s control may include:

- Serious illness or injury to a student that required extended recovery time
- Death or serious illness of a family member
- Significant trauma in student’s life that impaired the student’s emotional and/or physical health
- Other documented situations

Before submitting the Appeal Packet, students should have a completed FAFSA on file. Students should also complete “Exit Counseling” at www.studentloans.gov if they have borrowed funds from the Federal Direct Student Loan program. In addition, students should also submit official academic transcripts from all colleges attended. Student copies will be accepted in certain circumstances. Results of the transcripts or failure to provide transcripts, will factor into the decision of the Financial Aid Appeal Committee.
Appeal Decisions

The Financial Aid Committee will generally review all completed Appeal Packets within 2-4 weeks of submission. Before a decision is finalized, students may need to meet with a Financial Aid Officer. The student will be notified by email of the committee’s decision. If an appeal is approved, the student regains their eligibility for federal and state aid. The student must meet the conditions of the IAP until he or she is able to meet SAP or if the student has an approved appeal for the “Maximum Time Frame” requirement, they must meet the terms of the IAP until they graduate.

Failure to Meet the Terms of the Academic Plan

Failure to meet the terms of the IAP will result in loss of eligibility for federal and state financial aid. Students may file subsequent appeals if there were different extenuating circumstances from the original appeal. If students are requesting an approval for a change of program of study, they must meet with an Academic Advisor, and submit a revised IAP, a Change of Program Appeal Form and documentation to the Financial Aid Office for approval.

Students who have an Approved Appeal but fail to enroll for one full academic year will return to an “Ineligible” status. Students may need to meet with a Financial Aid Officer and an Academic Advisor before their appeal can be considered for reinstatement. The Financial Aid Committee has the right to deny reinstatement of a formally Approved Appeal on a case by case basis. Grounds for denial may include credit hours taken at another institution, change in the approved program of study, or any unresolved issues that may prevent the student from achieving academic success.

Denied Appeals

If the appeal is denied but there are circumstances or documentation that was not considered in the original decision, the student may request a second review of the appeal. The request and any additional documentation must be submitted in writing to the Director of Financial Aid. The Financial Aid Advisory Committee will review the request and notify the student of the decision within ten business days. The committee's decision will be considered final. The Financial Aid Advisory Committee consists of department representatives from advising, financial aid, admissions, compliance and faculty. A minimum of three members is required for reviewing the request and reversing the denial.

NOTICE OF FINANCIAL AID PENALTIES FOR DRUG LAW VIOLATIONS DRUG CONVICTION POLICY DISCLOSURE

Please Note: This notification is sent to all enrolled students, whether using Financial Aid or not.

Mid Michigan Community College is required to notify all students of the federal regulations and penalties for drug law violation while receiving Title IV funds under the Higher Education Act. MMCC is required to provide a timely notice to each student who has lost eligibility for any grant or loan assistance as a result of said penalties. We advise the student of ways in which to regain eligibility. Penalties are only imposed when students are receiving Federal Title IV funds.

This notice is being provided to you since you have recently registered for classes at MMCC. Please take a moment to read and become familiar with this information. You may direct any questions or concerns to the Financial Aid Office by e-mail at finaid@midmich.edu or by phone at 989-386-6664.

Students Convicted of Possession or Sale of Drugs:

If a student, receiving Title IV funding, has been convicted of an offense involving the possession or sale of illegal drugs while enrolled, the student becomes ineligible to receive Title IV funds. If the offense occurred outside of an enrollment period, the student is still eligible to receive funding.

When completing the Federal Student Aid (FAFSA) Free Application, students self-certify and respond to questions regarding drug convictions. Should a conviction occur after a student has submitted the FAFSA, the student must notify the Financial Aid Office, immediately. A conviction denotes a conviction that is on a student’s record. A conviction that was reversed, set aside, or removed from the student’s record is not relevant for these purposes. In addition, it is not a determination or adjudication arising out of a juvenile proceeding.

An illegal drug is a controlled substance as defined by section 102(6) of the Controlled Substance Act (CSA) (Title 21 of the United States Code section 802), and does not include alcohol or tobacco.

Loss of Eligibility and Penalties:

<table>
<thead>
<tr>
<th>POSSESSION OF ILLEGAL DRUGS</th>
<th>PERIOD OF INELIGIBILITY</th>
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</thead>
<tbody>
<tr>
<td>First Offense</td>
<td>Ineligible for one year after</td>
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<tr>
<td></td>
<td>date of conviction</td>
</tr>
<tr>
<td>Second Offense</td>
<td>Ineligible for two years after</td>
</tr>
<tr>
<td></td>
<td>date of second conviction</td>
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<tr>
<td>Third Offense</td>
<td>Ineligible indefinitely after</td>
</tr>
<tr>
<td></td>
<td>date of the third conviction</td>
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<table>
<thead>
<tr>
<th>SALE OF ILLEGAL DRUGS</th>
<th>PERIOD OF INELIGIBILITY</th>
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<tbody>
<tr>
<td>First Offense</td>
<td>Ineligible for two years after</td>
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<tr>
<td></td>
<td>date of conviction</td>
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<tr>
<td>Second Offense</td>
<td>Ineligible indefinitely after</td>
</tr>
<tr>
<td></td>
<td>date of conviction</td>
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</tbody>
</table>

In the event that a student is convicted of both, possessing and selling illegal drugs and the periods of ineligibility differ, it will result in the longer period of ineligibility.

Notice After Loss Eligibility

Students who become ineligible for financial aid due to a drug related conviction will receive written notification from the Financial Aid Office, via e-mail to their midmail account, advising of the loss. Information will also be provided on ways in which eligibility can be regained.
How to Regain Eligibility

A student regains eligibility the day after the period of ineligibility ends or when they successfully complete a qualified drug rehabilitation program. Additional drug related convictions will render a student ineligible again.

A student who successfully completes a drug rehabilitation program following their most recent drug conviction, regains eligibility on the date of the Program completion. A drug rehabilitation program is one that:

- Includes at least two unannounced drug tests and,
- Has received or is qualified to receive funds directly or indirectly under a Federal, State or Local government program;
- Is administered or recognized by a Federal, State, or Local government agency or court;
- Has received or is qualified to receive payment directly or indirectly from a Federally or State licensed insurance company, or
- Is administered or recognized by a Federally or State licensed hospital, health clinic or medical doctor.

Additional Information

For more information the Higher Education Act as it pertains to drug law violations please see:

http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=a4f397ff686f45d9d8c550757190bd9&rgn=div8&view=text&node=34:3.1.3.1.34.3.39.10&idno=34

or


For additional Student Right to Know information please visit:www.midmich.edu/righttoknow

RETURN OF TITLE IV FUNDS POLICY

Students who withdraw from all classes prior to completing more than 60% of a semester will have their eligibility for aid recalculated based on the percent of the semester completed. For example, a student who withdraws and completes 30% of the semester will have "earned" only 30% of any Title IV aid to they are entitled to. The school and/or the student must return the remaining 70%. Students considering withdrawal from all classes PRIOR to completing 60% of the semester are strongly encouraged to contact the Financial Aid Office to determine how withdrawal will affect current and future financial aid.

1. This policy applies to all students who withdraw, drop out, unofficially withdraw, receive all F's and/or W's, or are expelled from MMCC and receive financial aid from Title IV funds:

A. Title IV Funds include Federal financial aid programs authorized under the Higher Education Act of 1965, as amended, and includes the following programs: Federal Direct Loans including Stafford Unsubsidized, Stafford Subsidized, and PLUS Loans, Federal Pell Grants, and Federal SEOG.

B. A student's official withdrawal date is the date the student began the institution's withdrawal process as defined in the MMCC Catalog, officially notified the institution of intent to withdraw, or the midpoint of the period for a student who leaves without notifying the institution, or the student's last date of attendance at a documented academically related activity.

2. Title IV aid is earned in a prorated manner on a per day basis up to and including the 60% point in the semester. Title IV aid and all other aid is viewed as 100% earned after 60% of the semester is complete.

A. When the total amount of unearned aid is greater than the amount returned by MMCC from the student's account, the student is responsible for returning unearned aid to the appropriate program(s) as follows:

1. Unsubsidized Stafford Loan*
2. Subsidized Stafford Loan*
3. PLUS - Parent Loans to Undergraduate*
4. Federal Pell Grant
5. Federal SEOG

*Loan amounts are returned within the terms of the promissory note.

3. A notice of the refund calculation will be sent to the student's MMCC email following the withdrawal or after grades are submitted at the end of the semester. A copy of the calculation is available upon request.

A. Students are responsible for any portion of their institutional charges that the college has to return to the federal aid program. Repayment arrangements may be made with the MMCC Business Office within fourteen days to avoid further action.

B. Students who owe unearned grant aid directly to the federal program may repay the college within fourteen days to avoid losing Title IV eligibility and being turned over to the U.S. Department of Education (FSA) Collection Division.

4. If you did not receive all of the funds that you earned, you may be due a post-withdrawal disbursement. If the post-withdrawal disbursement includes loan funds, you must notify MMCC that you wish to receive the loan funds. MMCC may automatically use all or a portion of your post-withdrawal disbursement including loan funds, if you accept them for current year tuition and fees. For all other school charges, the school needs your permission to use the post-withdrawal disbursement. If you do not give your permission, you will be offered the funds. However, it may be in your best interest to allow MMCC to keep the funds to reduce your debt.
5. You must return all additional documentation, verification, corrections, and/or new information requested by either the Financial Aid Office or the agency to which you submitted your application.

4. You are responsible for reading and understanding all forms that you are asked to sign and for keeping copies of them.

5. You must accept responsibility for all agreements that you sign.

6. You must perform the work that is agreed upon in accepting a Work Study job.


8. You are responsible for reporting the type and amount of any assistance you have received from any source outside of your MMCC aid.

9. You must be attending your classes in order to be eligible for Federal Aid funding.

**Rights of Financial Aid Applicants**

1. You have the right to know what financial aid programs are available.

2. You have the right to know the deadlines for submitting applications for each of the financial aid programs available.

3. You have the right to know how financial aid will be distributed, how decisions on that distribution are made, and the basis for these decisions.

4. You have the right to know how your financial need was determined and what resources (such as parental contribution, other financial aid, your assets, etc.) were considered in the calculation of your need.

5. You have the right to know how much of your financial need as determined by the institution has been met.

6. You have the right to request an explanation of the various programs in your student aid package.

7. You have the right to know the MMCC refund policy.

8. You have the right to know what portion of the financial aid you received must be repaid, the payback procedures, the length of time you have to repay, and when repayment is to begin.

9. You have the right to know how MMCC determines whether you are making satisfactory academic progress and what happens if you are not.

For an explanation of any of the above rights, please review the information in this catalog or come in to the Financial Aid Office and meet with a Financial Aid Representative.

**Responsibilities of Financial Aid Applicants**

1. You must complete all application forms accurately and submit them on time to the right place.

2. You must provide correct information. If you purposely give false or misleading information, you may be fined up to $20,000, sent to prison, or both.

3. You must return any notification of a withdrawal or cancellation of classes should be in writing and addressed to the Enrollment Services Office.

**STATEMENT OF STUDENT FINANCIAL AID RIGHTS AND RESPONSIBILITIES**

**Rights of Financial Aid Applicants**

1. You have the right to know what financial aid programs are available.

2. You have the right to know the deadlines for submitting applications for each of the financial aid programs available.

3. You have the right to know how financial aid will be distributed, how decisions on that distribution are made, and the basis for these decisions.

4. You have the right to know how your financial need was determined and what resources (such as parental contribution, other financial aid, your assets, etc.) were considered in the calculation of your need.

5. You have the right to know how much of your financial need as determined by the institution has been met.

6. You have the right to request an explanation of the various programs in your student aid package.

7. You have the right to know the MMCC refund policy.

8. You have the right to know what portion of the financial aid you received must be repaid, the payback procedures, the length of time you have to repay, and when repayment is to begin.

9. You have the right to know how MMCC determines whether you are making satisfactory academic progress and what happens if you are not.

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**Responsibilities of Financial Aid Applicants**

1. You must complete all application forms accurately and submit them on time to the right place.

2. You must provide correct information. If you purposely give false or misleading information, you may be fined up to $20,000, sent to prison, or both.

3. You must return any additional documentation, verification, corrections, and/or new information requested by either the Financial Aid Office or the agency to which you submitted your application.

4. You are responsible for reading and understanding all forms that you are asked to sign and for keeping copies of them.

5. You must accept responsibility for all agreements that you sign.

6. You must perform the work that is agreed upon in accepting a Work Study job.


8. You are responsible for reporting the type and amount of any assistance you have received from any source outside of your MMCC aid.

9. You must be attending your classes in order to be eligible for Federal Aid funding.

**MID MICHIGAN COMMUNITY COLLEGE SCHOLARSHIPS**

Mid Michigan Community College uses an online resource to make it easier for our students to apply for various scholarships that are available. The online application is available each year November 1 through April 1 for the upcoming academic year. Check the Financial Aid home page for more information at www.midmich.edu/finaid.

Availability of scholarships is subject to change based upon minimum fund balances sufficient to make awards on deposit with MMCC. For a complete list of MMCC scholarships visit www.midmich.edu/scholarships.

**Laker Distinction Presidential Scholarship:** This scholarship covers tuition and fees at MMCC for up to 62* credit hours, which is the average for an associates degree, and it is renewable for a second year. Distinguished Presidential Scholars will also receive a $500 stipend each semester to cover their required course books and supplies. Open to graduating Michigan seniors with cumulative GPA’s of 3.5 or higher. These competitive scholarships will select recipients based on character, leadership, service, and academic success. Learn more at midmich.edu/distinction

**Laker Distinction Scholarship:** This scholarship covers tuition and fees at MMCC for up to 31* credit hours, which is roughly one-half of an associates degree or one year of college at fulltime status. It is non-renewable. Open to graduating Michigan seniors with cumulative GPA’s of 3.5 or higher. These competitive scholarships will select recipients based on character, leadership, service, and academic success. Learn more at midmich.edu/distinction

*L Both in and out-district students will have all tuition and fees covered fully.

**Admissions Award:** These scholarships for $1,000 ($500 fall/winter semesters) will be granted to students from local high schools who hold the highest GPA’s and attend MMCC. Admissions Awards are non-need-based and must be used for the semester for which they are awarded. Students should submit their transcripts with six completed semesters by April 1 in order to be considered.
Michigan Rehabilitation Services: Michigan Rehabilitation Services is a division of the Michigan Department of Human Services and provides rehabilitative services to vocationally handicapped or impaired individuals. Any person with impairment can complete an application for service by contacting the Office of the State of Michigan Rehabilitation Services serving the student’s local area. All services provided are individually planned to meet the established need and could include, for example, tuition, fees, books, prosthetic devices, maintenance, or other services that would be required for the completion of a rehabilitation program.

Michigan Competitive Scholarships: These scholarships are credited to tuition and fees of Michigan residents of 12 months who are high school graduates, who qualify through a competitive examination, and who show financial need. Awards may be renewed annually for a maximum of ten semesters as long as need and at least a 2.0 GPA are maintained. More information is available from high school counselors and by contacting Student Scholarships & Grants, at 1-888-447-2687 or email ssg@michigan.gov or mistudentaid@michigan.gov.

Federal Pell Grants: Students may apply for Pell Grants by filing a FAFSA. Eligibility for Pell Grants is based on financial need as determined by the federal formula and is applied to all applicants. Awards for 2017-2018 range from $606-5,920 and are subject to change. The amount of the award will be adjusted based on the student’s actual enrollment status.

Federal College Work-Study Program (FCWS): These work opportunities are awarded to students who meet requirements included in the Financial Aid Eligibility section. Job placement extends to most areas of College activity. Every effort is made to refer students to positions compatible with their interests and qualifications, although this is not always possible. Pay rates are commensurate with federal wage guidelines. Students are paid once every two weeks for hours worked. Placement of students in FCWS employment is handled through Personnel Services. Applications can be obtained online at https://www.michigan.gov/mistudentaid.
Federal Supplementary Educational Opportunity Grants (FSEOG) is a federal grant awarded to students with the greatest financial need according to the federal formula. The grants vary from $100 to $1,600 per year for MMCC students. Students must be making satisfactory progress; and meet all other conditions outlined in the Financial Aid Eligibility section to continue receiving the grant. The FSEOG is awarded by the Financial Aid Office in accordance with federal guidelines.

William D. Ford Federal Direct Loan Program provides low-interest Stafford Student Loans directly from the Department of Education. Student loans are insured by the federal government. These loans are only to be used to finance the cost of education and must be repaid.

Subsidized Stafford Loans are based on financial need and the interest is paid by the government while the student is in school. Unsubsidized Stafford Loans are for students who do not qualify for Subsidized Stafford Loans or are borrowing more than the subsidized limits. Students are responsible for the interest from the time the loan is disbursed until the loan is paid in full. The interest rate is determined by federal regulation and may be paid monthly, quarterly, or capitalized. Capitalizing interest will increase the amount of loan the student will have to repay.

Loans are made in equal multiple disbursements throughout the academic loan period. The lender may charge up to 1.5% in fees on each loan disbursement. Students can receive a subsidized loan and an unsubsidized loan for the same enrollment period as long as the annual loan limits are not exceeded.

The annual loan limits for dependent students are:
- $5,500 for students with less than 24 completed credit hours. No more than $3,500 can be in Subsidized Stafford Loans.
- $6,500 for students with 24 or more completed credit hours. No more than $4,500 can be in Subsidized Stafford Loans.

Dependent students whose parents cannot borrow under the Federal PLUS loan program can borrow up to an additional $4,000 in additional unsubsidized loans.

The annual loan limits for independent students are:
- $9,500 for students with less than 24 completed credit hours. No more than $3,500 can be in Subsidized Stafford Loans.
- $10,500 for students with 24 or more completed credit hours. No more than $4,500 can be in Subsidized Stafford Loans.

For either type of Stafford loan, students must first fill out a FAFSA and provide the college all necessary forms to complete the financial aid file requirements. Students may be eligible for a Federal Direct Loan if they meet the requirements included in the Financial Aid Eligibility section and are enrolled at least half-time (6 credits). Students must complete all federal and school requirements such as completing Entrance Loan Counseling, a Master Promissory Note (MPN) and a Direct Loan Request Form. If the loan is approved, the borrower will receive a Disclosure Statement from the Department of Education listing the approved amount of the loan and the approximate date(s) the loan funds will be sent to the school.

The Department will be making a financial commitment to the borrower by helping to finance the student's education. Borrowers will be responsible for contacting their loan servicer immediately if they:
1. Withdraw, graduate or are enrolled less than halftime;
2. Change their name or address; and/or
3. Transfer schools.

In their last semester of attendance, students must complete Exit Counseling. Six months after a student is no longer enrolled at least half-time, payment arrangements must be made with the loan servicer. Payment arrangements are subject to all of the following regulations:
1. The minimum monthly payment must be $50. Under unusual circumstances the loan servicer may permit reduced payments.
2. The standard repayment period is 10 years; however, there are other repayment options available for up to 25 years.
3. Repayment in whole or in part may be made at any time without penalty.

Students may be entitled to a temporary postponement of payments called a “deferment.” Loan Servicers have a complete listing of all authorized deferments and time limitations. This information may also be found on the student’s master promissory note.

Default will occur if the borrower:
1. Fails to make scheduled loan payments; or
2. Fails to meet other terms of the promissory note.

If the student defaults on the loan, the student’s loan servicer may, add collection costs, report the default to national credit bureaus, and may pursue collection in the following manner:
1. Assign the student’s loan to a collection agency;
2. File suit against the student to recover the amount owed, plus court costs and fees;
3. Garnish the student’s wages or federal funds; and/or
4. Withhold federal and state income tax refunds.

A defaulted loan is immediately due and payable in full. Student’s credit rating will be adversely affected and may seriously jeopardize chances for qualifying for any future loans (auto, mortgage, etc.) Students who have defaulted on loans will not be eligible to receive any additional Federal or State Financial Aid.

PLUS Loans are for parents or legal guardians, who want to borrow to help pay for their dependent children’s education. The child’s dependency status will be determined by completing a FAFSA. Parent Plus loan eligibility is contingent upon credit
Veterans Administration benefits are available to veterans of the armed services and/or dependents/spouses of veterans. The following information references the veteran; however it is for all qualifying individuals. To qualify for VA benefits, veterans must apply online at www.vets.gov. All students must complete the MMCC Admissions Application and then contact a MMCC Veterans Representative. To ensure prompt receipt of VA payments, veterans must be registered for classes at least 30 days prior to start of each semester. To be eligible for maximum benefits, veterans must enroll full-time each semester. Students enrolled less than full time are eligible for prorated payments but have to take at least 7 credits to receive the VA monthly housing stipend. Veterans who have attended other schools beyond high school must have an official transcript from their previous school(s) sent to the MMCC Office of Enrollment Services for evaluation of possible transfer credit(s). MMCC will notify the US Department of Veterans Affairs and the veteran, of the credit(s) granted. In accordance with VA guidelines, veterans must make satisfactory academic progress towards their degree to continue receiving VA benefits. Veterans not meeting the minimum standards of the MMCC Financial Aid Satisfaction Academic Progress Policy will no longer be eligible to receive VA benefits. Veterans who have previously received VA benefits at other institutions must complete the “Change of Study/Program” form. Students that are covered under any of the veteran’s programs must contact the Financial Aid Office each semester to sign a certification form.

Michigan Children of Veterans Tuition Grant: Dependent children of deceased or disabled veterans whose injuries were a result of military service may be eligible for VA Benefits. Children must be between the ages of 18 and 23. They must be enrolled at least half-time and the amount will depend on enrollment status. Applications may be obtained online at https://www.michigan.gov/mistudentaid. Please contact the Veterans Representative if you have difficulty locating the application.

THE COST OF ATTENDING COLLEGE

TUITION RATES*

In-District Resident, Out-District Resident, and International rates are available on our website, and are charged per contact hour. Any individual using educational assistance under either Chapter 30 (Montgomery GI Bill® – Active Duty Program), Chapter 33 (Post-9/11 GI Bill®), of title 38, United States Code, and/or the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in the State of Michigan while attending Mid Michigan Community College (regardless of his/her formal state of residence) will be granted in-state tuition rates.

Once the student qualifies for in-state tuition, that status will continue while the student stays enrolled in the same degree program at MMCC. The in-state tuition rate would remain in effect even if the student’s military spouse or parents are transferred out of Michigan.

Students are considered in-district residents if they meet one of the following criteria:

1. They are a dependent students (according to the IRS regulations) residing with a parent or guardian and the parent or guardian maintains their primary residence within one of the public school districts of Beaverton, Clare, Farwell, Gladwin, or Harrison.

2. They have resided within the college district at the time of registration and are a United States citizen or permanent resident.

3. The student, the student’s spouse, or the parents of a dependent student hold real property within the College district against which real property taxes have been assessed in support of the College for the tax period immediately preceding registration; the tax receipt must show proof of payment of taxes in support of the College.

4. The student is an employee of a business or industrial firm or governmental agency or is a member of professional organization within the College district and the employer or organization, by written agreement, agrees to pay directly to the College all tuition and/or fees of a student for employer-approved courses.

5. Military personnel whose Home of Record or Legal Residence is within one of the public school districts of Beaverton, Clare, Farwell, Gladwin, or Harrison.


*Tuition rates are subject to change without notice by action of the Board of Trustees.

Students must verify residency at the time of each official registration by providing an appropriate document such as a driver’s license, voter registration card, Secretary of State Identification Card, or property tax receipt for the tax period immediately preceding registration, or by procedures as authorized by the President.

In addition, informational postcards will be mailed to the student’s address on our system using the “POSTMASTER DO NOT FORWARD” label. If a postcard is returned to MMCC because the mail is undeliverable, future registrations will be billed at the out-of-district rate until the student proves residency.

Contact Hour(s): As of the summer 2002 session, students will be charged tuition based on contact hours instead of
academic credit hours.

Contact hours are computed by totaling the lecture + lab hours. For example:

BIO.101 4 credits (3 lectures + 2 labs) 3+2 = 5 contact hours

There is a cap of 15 contact hours per class. Please refer to your schedule for contact hours on current course offerings.

Credit Hour Definition: For each credit hour awarded, MMCC will require 800 minutes of instruction, or its equivalent, be delivered. In addition to this instructional time, there will be two (2) hours of out-of-class student work each week for fifteen weeks, or its equivalent. For courses delivered in an online format, they will be awarded the same credit hours as their face-to-face version provided that the same learning outcomes are expected in both formats.

Credit hours for labs, clinicals, internships, co-ops and other similar instructional activities will be awarded on a ratio of contact hours to credit hours ranging from 2:1 to 5:1, depending on how independently the student is working. The more independently the student works, the more time required. For example, in a typical science lab where there is a lab instructor present and overseeing the students as they conduct independent experiments, a 2:1 ratio is appropriate. In an automotive co-op setting where the students are working even more independently on repairing cars, and only having the instructor inspect their completed work or the student checking in with the instructor when they encounter a difficulty, the ratio of 5:1 would be appropriate.

FEES**

Assessment Fees: Anyone who is not a registered MMCC student will be charged an Assessment Fee when making use of the services of the Library & Learning Services (LLS). (A complete listing of fees is available in the LLS).

Course Fees: Such fees are charged for selected courses to defray the cost of special equipment or materials.

Enrollment Fee: A non-refundable enrollment fee is required each semester a student enrolls, with the amount based upon total contact hours taken. The fee schedule is as follows:

- $50 (6 contact hours or more)
- $25 (5.9 contact hours or less)

Facilities Fee: A $10 per contact hour fee is assessed on all courses offered on the Harrison or Mt. Pleasant campuses.

Student Activities Fee: A $60 fee is assessed each semester to all students enrolling in 3 or more contact hours.

Technology Fee: A $15 per contact hour fee is assessed to all students.

**Fees are subject to change without notice by action of the Board of Trustees.

PERCENT OF TUITION AND FEE REFUND SCHEDULE

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<tr>
<th>Calendar days beginning with and including first day of classes.</th>
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<tbody>
<tr>
<td>Full Semester</td>
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<td>11 Week Classes</td>
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<td>9 Week Classes</td>
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<td>8 Week Classes</td>
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<td>3 Week Classes</td>
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<td>1 Week Classes</td>
<td>100</td>
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</table>

The date the drop is initiated will be counted as the date of refund.

ENROLLMENT FEE IS NON-REFUNDABLE

The Enrollment Fee is based upon the date when a student withdraws from a course. During a 16-week semester, a full refund is allowed through the first 7 calendar days of the semester. There is no differentiation between partial and total withdrawals in terms of percentage of refund of tuition and fees. Sessions containing less than 16 weeks are prorated, as are classes that vary in length. Library Learning Services courses and Independent Study courses shall be considered to be 16 weeks in length.

TUITION PAYMENT PLAN

All students are expected to pay 100% of all assessed charges at the time of registration. Students may opt to use a convenient tuition budget plan offered by Nelnet Business Solutions for a $25.00 per semester NON-REFUNDABLE fee.

Brochures explaining the program are available at the Office of Enrollment Services on either campus, on the MMCC web site www.midmich.edu, or you may call Mid Michigan Community College Cashier’s Office at (989)386-6611 or NBS at (800) 609-8056.

OUTSTANDING BILLS

Any student with an outstanding bill with the College will not be allowed to use any charge system, will not be allowed to re-enroll, and will not be able to obtain grades, transcripts, or diplomas until such time as their bill is paid in full.
COLLEGE BOOKSTORE PURCHASES

You have the option of using your financial aid to pay for charges and fees incurred beyond your tuition costs such as: Bookstore charges, Library fines, or Club Membership fees. Your financial aid may include Federal Student Aid, which includes the Pell Grant, the Supplemental Educational Opportunity Grant, and Federal Direct Stafford Loans. You have the right to cancel or modify this approval at any time by submitting a signed, dated, written request to the MMCC Financial Aid Office. A request for cancellation or modification is effective as of the date is received by MMCC. Because this request is not retroactive, MMCC may use FSA funds to pay any authorized charges incurred before the notice was received by the College.

Bookstore charges typically start one week before the start of each semester. Please check the MMCC Bookstore website at www.midmich.edu for specific dates. Your MMCC student ID is required to charge at the bookstore.

COLLEGE PROGRAMS

Mid Michigan Community College offers training credentials, certificates and associate degrees. Also available are transfer programs and career programs. Transfer programs are planned for students intending to transfer credits earned at Mid Michigan Community College to another institution. Transfer guides for many institutions are available on the college’s transfer website at www.midmich.edu/transfer. Students planning to transfer are strongly encouraged to consult early with the transfer receiving institution for specific course selection.

The College is a signatory to the Michigan Association of Collegiate Registrars and Admissions Officers agreement (MACRAO) and to the Michigan Transfer Agreement (MTA). Students may meet MACRAO or MTA agreement requirements without obtaining an Associate degree. (Only students who began collegiate level coursework prior to Fall Semester 2014 will be able to complete the MACRAO requirements; such students may choose to complete the MTA requirements. Students who begin collegiate level coursework beginning Fall Semester 2014 will not be eligible for a MACRAO endorsement.)

Career programs are designed to provide students with the necessary skills and related knowledge to qualify for skilled, technical, and semi-professional positions in business, industry, and the allied health fields.

In addition to the above programs, Mid Michigan Community College offers a variety of continuing education and community service courses, workshops, and seminars.

GENERAL EDUCATION REQUIREMENTS

Any student who enrolls in an associate degree program at MMCC is required to fulfill the competencies of the General Education program for that degree. General Education requirements may be met by completing the required coursework, meeting equivalent competency (as stated below) or through Credit by Examination.

GENERAL EDUCATION FOR ASSOCIATE IN APPLIED SCIENCES AND ASSOCIATE IN NURSING DEGREES

LEVEL I: CIS 100, ENG 111, MAT (as specified on the degree) & either SPE 101 or 257

LEVEL II: HUM 200, SCI 200, and SSC 200 or their respective equivalents

SCI 200 -or- 7 hrs in Science with coursework from two different course designators (one class w/lab required)

SSC 200 -or- 9 hrs in 2 Social Science disciplines

HUM 200 -or- 9 hrs of Humanities with at least 3 credits at 200 level -or- 6 hrs of Humanities & 3 hrs Fine Arts one of which is at the 200 level

Students who transfer to MMCC after completing a degree at an accredited institution will be given the following exemptions:

1. From a Two-Year Institution: Students transferring to MMCC with a two-year degree from an accredited institution will be exempt from 100 Level General Education requirements with the exception of math. 200 Level requirements will be determined in the transcript evaluation process.

2. From a Four-Year Institution: Students transferring to MMCC with a four-year degree from an accredited institution will be exempt from both the 100 and 200 Level General Education requirements with the exception of math.

Assessment of student academic achievement is an institutional requirement and may be required in General Education courses.

GENERAL EDUCATION FOR ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES

The Associate in Arts and Associate in Science Degrees are intended for students planning to transfer to a four-year college or university. Beginning in the 2014-2015 academic year, these degrees were redesigned to coordinate the General Education goals of each with the requirements of the Michigan Transfer Agreement. The coursework for General Education in the transfer degrees is as follows:

Communication Skills: Three courses -- ENG 111, ENG 222, and either SPE 101 or SPE 257

Quantitative Reasoning: One of the following -- MAT 107, MAT 114, or MAT 212. Any of the following can substitute for MAT 107 in this requirement: MAT 124, 126, 225, 226, or 230.

Natural Science: Two courses, each from a different subject area from the Natural Science Designated MTA list.

Social Science: Two courses, each from a different subject area,
from the Social Science Designated MTA list.

Humanities: Two courses, each from a different subject area, from the Humanities Designated MTA list.

The MTA Designated course lists were compiled based on transferability and suitability as part of a collegiate curricular core; they will be reviewed and updated on a regular basis. The courses are:

English Composition -- ENG 111
Communication -- ENG 222, SPE 101, SPE 257
Mathematics – Either MAT 114, MAT 212, or one of the following: MAT 107, 118, 126, 212, 217, 218, 225, 226, 230
Social Science – ANT 170; ECO 110, 201, 202; HIS 211, 212, 223; POL 201, 250; PSY 101, 103, 205, 212, 240, 285; SOC 101, 200, 202, 220, 250, 289; SSC 111, 200

Humanities -- ENG 112, 201, 202, 205, 206, 213, 289; FRN 101, 102; GER 101, 102; HIS 101, 102; HUM 101, 102, 183, 200, 205, 210, 225, 253; MUS 275; PHL 201, 205, 210, 220, 250; REL 111, 200, 225, 250; SPN 101, 102, 201; TAI 275

Credits transferred from other MTA granting institutions that have no direct equivalent to the above, but are granted departmental elective credit in one of the above areas, will also be eligible for application towards an MTA Endorsement from MMCC.

DISTRIBUTION GROUPS

All regular college courses offered by Mid Michigan Community College which apply toward associate degrees and certificate programs are arranged into Distribution Groups. Many of the programs specify a certain number of prescribed and elective courses in the various groups.

The groups are as follows:

I Communication Skills
   English 104, 110,111, 222, 225, Journalism, Speech

II Science and Mathematics
   Mathematics
   Natural Science: Biology
   Physical Science: Chemistry, Computer Science (CIS 110, 111, 151, 152, 175, 176), Geology, Physical Science, Physics, Science

III Social Science
   Anthropology, Economics, History 211, 212, 223, 251, 252, MID 103, Political Science, Psychology, Social Science, Sociology

IV Humanities and Fine Arts
   Fine Arts: Art, Music, Theatre (except MUS 275, TAI 275)

   Humanities: English 112, 201, 202, 205, 206, 211, 212, 213, 281, 289, French, German, History 101, 102, Humanities, Japanese, MUS 275, Philosophy, Religion, Spanish, TAI 275

V Applied Arts & Sciences

VI Health/Physical Education
   Health Education, Physical Education

VII Education
   Elementary Education, Secondary Education

VIII Personal Development
   MID Courses

MACRAO AGREEMENT

The College is a signatory of the Michigan Association of Collegiate Registrars and Admissions Officers Agreement (MACRAO), which allows students completing the MACRAO requirements to transfer into 4-year institutions that are also signatories* with 30 hours of general education requirements met.

To satisfy MACRAO requirements at Mid Michigan Community College, students must complete:
1. ENG 111 and ENG 222;
2. Eight hours of science and mathematics (Group II) electives in more than one discipline, with one course being a laboratory science;
3. Eight hours of social sciences (Group III) electives in more than one discipline; and
4. Eight hours of humanities and fine arts (Group IV) electives in more than one discipline.

AND

At Least 12 credit hours must be taken at MMCC.

MMCC will automatically verify MACRAO requirements and post a MACRAO training credential to the transcript if applicable, whenever a student completes a Graduation Application or Transcript Request Form.

*Some signatories have qualifications to the MACRAO agreement. Transfer students are advised to check with their transfer receiving institution for specific course selection.

Beginning with Fall Semester 2014, the MACRAO agreement is being replaced by the Michigan Transfer Agreement. Students who have begun collegiate level coursework prior to Fall Semester 2014 will have until the beginning of Fall
Semester 2019 to complete the requirements for the MACRAO endorsement. Students who begin coursework with the Fall Semester 2014 will be expected to pursue completion of the Michigan Transfer Agreement (MTA).

**MICHIGAN TRANSFER AGREEMENT**

Many Michigan four-year colleges and universities are part of the Michigan Transfer Agreement. The Agreement requires completion of 30 credit hours of coursework in general education areas. If a student has successfully completed the appropriate coursework, that student's transcript will be marked "MTA Satisfied." Participating four-year colleges and universities will accept that as completion of 30 credits towards their general education requirements. (NOTE: Not all four-year colleges and universities participate in MTA. Students intending to transfer should contact their intended transfer institution.) The MTA requires that colleges list coursework which is applicable. The following are MMCC's Designated MTA courses (by MTA area):

Designated MTA courses -- each course must be completed with a minimum grade of C

English Composition: ENG 111

Communication: Either ENG 222, SPE 101, or SPE 257

Mathematics: Either MAT 114, MAT 212, or one of the following: MAT 107, 118, 124, 126, 212, 217, 218, 225, 226, 230

Natural Science: Two of the following, each from a different subject area: BIO 100, 101, 131, 135, 141, 142, 201, 203, 210, 245; CHM 105, 106, 111, 112, 241, 242; GEL 101, 112; PHY 105, 211; PSC 101, 102; SCI 200. At least one must be a laboratory science.

Social Science: Two of the following, each from a different subject area: ANT 170; ECO 110, 201, 202; HIS 211, 212, 223; POL 201, 250; PSY 101, 103, 205, 212, 240, 285; SOC 101, 200, 202, 220, 250, 289; SSC 111, 200

Humanities: Two of the following, each from a different subject area: ENG 112, 201, 202, 205, 206, 213, 289; FRN 101, 102; GER 101, 102; HIS 101, 102; HUM 101, 102, 183, 200, 205, 210, 225, 253; MUS 275; PHL 201, 205, 210, 220, 250; REL 111, 200, 225, 250; SPN 101, 102, 201; TAI 275

**CANCELLATION OF COURSES AND PROGRAMS**

The courses and programs listed in this publication generally represent those presently available through Mid Michigan Community College; however, new courses are being developed continuously and circumstances sometimes necessitate the removal of courses and programs from the College's current offerings. In addition, not all courses and programs are available during any given semester. Please go to MidWeb on the College website for course offering information.
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**ASSOCIATE IN ARTS:**
**BUSINESS STUDIES TRANSFER**

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program. A minimum of 15 credit hours must consist of 200 level coursework.

<table>
<thead>
<tr>
<th>Credit hours</th>
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<tbody>
<tr>
<td>Course #</td>
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<tr>
<td>---</td>
</tr>
<tr>
<td>ENG 111</td>
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<tr>
<td>ENG 222</td>
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<tr>
<td>SPE 101 OR SPE 257</td>
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<tr>
<td>MAT 107* OR MAT 114 OR MAT 212</td>
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</tbody>
</table>

*MAT 124, 126, 225, 226, and 230 also satisfy this requirement. Other MAT courses do not.

<table>
<thead>
<tr>
<th>Social Sciences (Group III) - 9 credit hours</th>
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<tbody>
<tr>
<td>ECO 201</td>
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<td>ECO 202</td>
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<tr>
<th>Humanities (Group IV) - 6 credit hours</th>
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<thead>
<tr>
<th>Program Electives - 13 credits from ACC, BUS, CIS or BIS only</th>
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<tr>
<th>Electives – credits to reach minimum of 62</th>
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Students are encouraged to meet with an Academic Advisor to select courses that are appropriate for academic and career goals. Distribution Group and Designated MTA course lists on reverse (print version) or page two (digital version)
ASSOCIATE IN ARTS:  
BUSINESS STUDIES TRANSFER

GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES

Students completing transfer degrees are required to complete the following:

| Communication Skills: Three courses -- ENG 111, ENG 222, and either SPE 101 or SPE 257 |
| Quantitative Reasoning: One of the following -- MAT 107, MAT 114, or MAT 212 |
| Natural Science: Two courses from the MTA list below, each from a different subject area. |
| Social Science: Two courses from the MTA list below, each from a different subject area. |
| Humanities: Two courses from the MTA list below, each from a different subject area. |

MICHIGAN TRANSFER AGREEMENT

Many Michigan four-year colleges and universities are part of the Michigan Transfer Agreement. The Agreement requires completion of 30 credit hours of course work in general education areas. If a student has successfully completed the appropriate coursework, that student's transcript will be marked "MTA Satisfied". Participating four year colleges and universities will accept that as completion of 30 credits toward their general education requirements. (NOTE: Not all four year colleges and universities participate in MTA. Students intending to transfer should contact their intended transfer institution.) The MTA requires that colleges list coursework which is applicable. The following are MMCC's Designated MTA courses (by MTA area):

| Designated MTA courses -- each course must be completed with a minimum grade of C |
| English Composition | ENG 111 |
| Communication | Either ENG 222, SPE 101, or SPE 257 |
| Mathematics | Either MAT 114, MAT 212, or one of the following : MAT 107, 118, 124, 126, 212, 217, 218, 225, 226, 230 |
| Natural Science | Two of the following, each from a different subject area: BIO 100, 101, 111, 112, 131, 135, 141, 142, 201, 203, 210, 245; CHM 105, 106, 111, 112, 241, 242; GEL 101, 112; PHY 105, 211; PSC 101, 102; SCI 200. At least one must be a laboratory science. |
| Social Science | Two of the following, each from a different subject area: ANT 170; ECO 110, 201, 202; GEG 121; HIS 211, 212, 223; POL 201, 250; PSY 101, 103, 205, 212, 240, 285; SOC 101, 200, 202, 220, 250, 289; SSC 111, 200 |
| Humanities | Two of the following, each from a different subject area: ENG 112, 201, 202, 205, 206, 213, 289; FRN 101, 102; GER 101, 102; HIS 101, 102; HUM 101, 102, 183, 200, 205, 210, 225, 253; MUS 275; PHL 201, 205, 210, 220, 250; REL 111, 200, 225, 250; SPN 101, 102, 201; TAI 275 |

If necessary, additional Designated MTA courses to total or exceed 30 credit hours.

DISTRIBUTION GROUPS

| Group I - Communication Skills: ENG (104, 110,111, 222, 225), JOR, SPE |
| Group II - Science and Mathematics: BIO, CHM, CIS (110, 111, 121, 131, 151, 152, 175, 176), GEL, PSC, PHY, SCI; MAT |
| Group III - Social Science: ANT, ECO, GEG, HIS (211, 212, 223, 251, 252), MID (103 only), POL, PSY, SSC, SOC |
| Group IV - Humanities and Fine Arts: Humanities -- ENG (112, 201, 202, 205, 206, 211, 212, 231), FRN, GER, HIS (101, 102), HUM, JPN, MUS (275), PHL, REL, SPN, TAI (275); Fine Arts -- ART, MUS (except 275), TAI (except 275) |
| Group V - Applied Arts & Sciences: ACC, AIM, ALH, AMS, BUS, BIS, ECE, CIS (except 110, 111, 121, 131, 151, 152, 175, 176), CST, CIS, DRF, ENT, HRA, IND, LEN, NUR, MRI, PHT, PLT, PTA, RAD, WLD |
| Group VI - Health/Physical Education: HED, PED |
| Group VII - Education: EDU |
| Group VIII - Personal Development: MID (except 103) |
# ASSOCIATE IN ARTS:
## CRIMINAL JUSTICE – LAW ENFORCEMENT TRANSFER

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program. A minimum of 15 credit hours must consist of 200 level coursework.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Course #</th>
<th>Course Title</th>
<th>Contact/Billing Hours</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication Skills (Group I) - 9 credit hours</strong></td>
<td>ENG 111</td>
<td>Freshman English Composition</td>
<td>3</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
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<tr>
<td></td>
<td>ENG 222</td>
<td>Expository Writing &amp; Research</td>
<td>3</td>
<td>Minimum grade of “C” in ENG 111</td>
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<tr>
<td>OR SPE 257</td>
<td>Fundamentals of Communication</td>
<td>3</td>
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<tr>
<td>OR SPE 257</td>
<td>Public Speaking</td>
<td>3</td>
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<tr>
<td><strong>Science and Mathematics (Group II) – 10 credit hours</strong></td>
<td>MAT 107*</td>
<td>College Algebra</td>
<td>3</td>
<td>Minimum grade of “C” in MAT 105 or equivalent</td>
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<tr>
<td>OR MAT 114</td>
<td>Mathematical Reasoning</td>
<td>3</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
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<tr>
<td>OR MAT 212</td>
<td>Introduction to Probability and Statistics</td>
<td>3</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
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<tr>
<td>*MAT 124, 126, 225, 226, and 230 also satisfy this requirement. Other MAT courses do not.</td>
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<tr>
<td><strong>Social Sciences (Group III) - 6 credit hours</strong></td>
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<td></td>
<td>Two courses selected from the Designated MTA Natural Science list</td>
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<td>NOTE: Courses cannot be from same discipline.</td>
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<tr>
<td><strong>Humanities (Group IV) - 6 credit hours</strong></td>
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<tr>
<td></td>
<td>Two courses selected from the Designated MTA Social Science list</td>
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<td>NOTE: Courses cannot be from same discipline.</td>
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<tr>
<td><strong>Criminal Justice and Applied Science Courses - 15 credit hours</strong></td>
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<td>(Minimum of 9 hours in CJS required) Students should select CJS courses in conjunction with an advisor to develop a plan that best meets the requirements of their chosen transfer institution.</td>
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<td></td>
<td>CJS Elective</td>
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<td>CJS Elective</td>
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<td>CJS Elective</td>
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<td></td>
<td>Applied Science Elective (Group V)</td>
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<td></td>
<td>Applied Science Elective (Group V)</td>
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<tr>
<td><strong>Electives – credits to reach minimum of 62</strong></td>
<td></td>
<td></td>
<td>Choose from Group III, IV, V and VI (PED 255 recommended)</td>
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<td>Elective</td>
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<td>Elective</td>
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</tbody>
</table>

NOTE: Prior to entering Law Enforcement programs, students must meet with an advisor to assure that the student meets the minimum standards set by Michigan Commission on Law Enforcement Standards (MCOLES). After completion of the CJS associate program, students take and pass the MCOLES pre-employment reading/writing test and a physical skills test before entering a college MCOLES approved Police Academy.

Students are encouraged to meet with an Academic Advisor to select courses that are appropriate for academic and career goals. Distribution Group and Designated MTA course lists on reverse (print) or page two (digital).
GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES

Students completing transfer degrees are required to complete the following:

**Communication Skills:** Three courses -- ENG 111, ENG 222, and either SPE 101 or SPE 257

**Quantitative Reasoning:** One of the following -- MAT 107, MAT 114, or MAT 212

**Natural Science:** Two courses from the MTA list below, each from a different subject area.

**Social Science:** Two courses from the MTA list below, each from a different subject area.

**Humanities:** Two courses from the MTA list below, each from a different subject area.

MICHIGAN TRANSFER AGREEMENT

Many Michigan four-year colleges and universities are part of the Michigan Transfer Agreement. The Agreement requires completion of 30 credit hours of coursework in general education areas. If a student has successfully completed the appropriate coursework, that student’s transcript will be marked “MTA Satisfied”. Participating four year colleges and universities will accept that as completion of 30 credits toward their general education requirements. (NOTE: Not all four year colleges and universities participate in MTA. Students intending to transfer should contact their intended transfer institution.) The MTA requires that colleges list coursework which is applicable. The following are MMCC’s Designated MTA courses (by MTA area):

**Designated MTA courses -- each course must be completed with a minimum grade of C**

**English Composition**
- ENG 111

**Communication**
- Either ENG 222, SPE 101, or SPE 257

**Mathematics**
- Either MAT 114, MAT 212, or one of the following: MAT 107, 124, 126, 212, 225, 226, 230

**Natural Science**
- Two of the following, each from a different subject area: BIO 100, 101, 111, 112, 131, 135, 138, 141, 142, 201, 203, 210, 245; CHM 105, 106, 111, 112, 241, 242, 245, 246, 255, 256; GEL 101, 112; PHY 105, 211; PSC 101, 102; SCI 200. At least one must be a laboratory science.

**Social Science**
- Two of the following, each from a different subject area: ANT 170; ECO 110, 201, 202; ECO 110, 101, 102; HES 121, 212, 223; POL 201, 250; PSY 101, 103, 205, 212, 240, 285; SOC 101, 200, 202, 220, 250, 289; SSC 111, 200

**Humanities**
- Two of the following, each from a different subject area: ENG 112, 201, 202, 205, 210, 206, 213; FRN 101, 102; GER 101, 102; HIS 101, 102; HUM 101, 102, 183, 200, 205, 210, 225, 253; MUS 275; PHL 201, 205, 210, 220, 250; REL 111, 200, 225, 250; SPN 101, 102, 201; TAI 275

If necessary, additional Designated MTA courses to total or exceed 30 credit hours.

DISTRIBUTION GROUPS

**Group I - Communication Skills:** ENG (104, 110, 111, 222, 225), JOR, SPE

**Group II - Science and Mathematics:** BIO, CHM, CIS (110, 111, 121, 131, 151, 152, 175, 176), GEL, PSC, PHY, SCI; MAT

**Group III - Social Science:** ANT, ECO, GEG, HES, HIS (211, 212, 223, 251, 252), POL, PSI, SSC, SOC

**Group IV - Humanities and Fine Arts:** Humanities -- ENG (112, 201, 202, 205, 206, 211, 212, 213, 281); FRN, GER, HIS (101, 102); HUM, JPN, MUS (275); PHL, REL, SPN, TAI (275); Fine Arts -- ART, MUS (except 275), TAI (except 275)

**Group V - Applied Arts & Sciences:** ACC, AIM, ALH, AMS, BUS, BIS, ECE, CIS (except 110, 111, 121, 131, 151, 152, 175, 176), CST, CJS, DRF, ENT, HRA, IND, LEN, NUR, MRI, PHT, PLT, PTA, RAD, WLD

**Group VI - Health/Physical Education:** HED, PED

**Group VII - Education:** EDU

**Group VIII - Personal Development:** MID
ASSOCIATE IN ARTS:
LIBERAL STUDIES TRANSFER

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program. A minimum of 15 credit hours must consist of 200 level coursework.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course #</strong></td>
<td><strong>Course Title</strong></td>
</tr>
</tbody>
</table>

### Communication Skills (Group I) - 9 credit hours
- ENG 111 3 3 Freshman English Composition
  - Placement into ENG 111 or ENG 110 with a minimum grade of “C”
- ENG 222 3 3 Expository Writing & Research
  - Minimum grade of “C” in ENG 111
- SPE 101 3 3 Fundamentals of Communication
- OR SPE 257 3 3 Public Speaking

### Science and Mathematics (Group II) – 10 credit hours
- MAT 107 3 3 College Algebra
  - Minimum grade of “C” in MAT 105 or equivalent
- OR MAT 114 3 3 Mathematical Reasoning
  - Minimum grade of “C” in MAT 104 or equivalent
- OR MAT 212 3 3 Introduction to Probability and Statistics
  - Minimum grade of “C” in MAT 104 or equivalent

*MAT 124, 126, 225, 226, and 230 also satisfy this requirement. Other MAT courses do not.

### Social Sciences (Group III) - 6 credit hours
- Two courses selected from the Designated MTA Natural Science list
  - NOTE: Courses cannot be from same discipline.

### Humanities (Group IV) - 6 credit hours (at least 3 credits at the 200 level)
- Two courses selected from the Designated MTA Social Science list
  - NOTE: Courses cannot be from same discipline.

### Electives - credits to reach minimum of 62
- Courses must come from Groups I, II, III, IV, V (maximum 9 credits), VI (maximum 6 credits) and VII.
- MID courses and courses below 100 level are NOT applicable.
- Elective
- Elective
- Elective
- Elective
- Elective
- Elective
- Elective
- Elective
- Elective

Students are encouraged to meet with an Academic Advisor to select courses that are appropriate for academic and career goals.

Distribution Group and Designated MTA course lists on reverse (print version) or page two (digital version)
ASSOCIATE IN ARTS:
LIBERAL STUDIES TRANSFER

GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES

Students completing transfer degrees are required to complete the following:

- **Communication Skills:** Three courses -- ENG 111, ENG 222, and either SPE 101 or SPE 257
- **Quantitative Reasoning:** One of the following -- MAT 107, MAT 114, or MAT 212
- **Natural Science:** Two courses from the MTA list below, each from a different subject area.
- **Social Science:** Two courses from the MTA list below, each from a different subject area.
- **Humanities:** Two courses from the MTA list below, each from a different subject area.

MICHIGAN TRANSFER AGREEMENT

Many Michigan four-year colleges and universities are part of the Michigan Transfer Agreement. The Agreement requires completion of 30 credit hours of course work in general education areas. If a student has successfully completed the appropriate coursework, that student’s transcript will be marked “MTA Satisfied”. Participating four year colleges and universities will accept that as completion of 30 credits towards their general education requirements. (NOTE: Not all four year colleges and universities participate in MTA. Students intending to transfer should contact their intended transfer institution.) The MTA requires that colleges list coursework which is applicable. The following are MMCC’s Designated MTA courses (by MTA area):

**Designated MTA courses -- each course must be completed with a minimum grade of C**

- **English Composition**: ENG 111
- **Communication**: Either ENG 222, SPE 101, or SPE 257
- **Mathematics**: Either MAT 114, MAT 212, or one of the following: MAT 107, 118, 124, 126, 212, 217, 218, 225, 226, 230
- **Natural Science**: Two of the following, each from a different subject area: BIO 100, 101, 111, 112, 131, 135, 141, 142, 201, 203, 210, 245; CHM 105, 106, 111, 112, 241, 242; GEL 101, 112; PHY 105, 211; PSC 101, 102; SCI 200. At least one must be a laboratory science.
- **Social Science**: Two of the following, each from a different subject area: ANT 170; ECO 110, 201, 202; geg 121; HIS 211, 212, 223; POL 201, 250; PSY 101, 103, 205, 212, 240, 285; SOC 101, 200, 202, 220, 250, 289; SSC 111, 200
- **Humanities**: Two of the following, each from a different subject area: ENG 112, 201, 202, 205, 206, 213, 289; FRN 101, 102; GER 101, 102; HIS 101, 102; HUM 101, 102, 183, 200, 205, 210, 225, 253; MUS 275; PHL 201, 205, 210, 220, 250; REL 111, 200, 225, 250; SNP 101, 102, 201; TAI 275

If necessary, additional Designated MTA courses to total or exceed 30 credit hours.

DISTRIBUTION GROUPS

<table>
<thead>
<tr>
<th>Group I - Communication Skills: ENG (104, 110, 111, 222, 225), JOR, SPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group II - Science and Mathematics: BIO, CHM, CIS (110, 111, 121, 131, 151, 152, 175, 176), GEL, PSC, PHY, SCI; MAT</td>
</tr>
<tr>
<td>Group III - Social Science: ANT, ECO, GEG, HIS (211, 212, 223, 251, 252), MID (103 only), POL, PSY, SSC, SOC</td>
</tr>
<tr>
<td>Group IV - Humanities and Fine Arts: Humanities -- ENG (112, 201, 202, 205, 206, 211, 212, 213, 281), FRN, GER, HIS (101, 102), HUM, JPN, MUS (275), PHL, REL, SPN, TAI (275); Fine Arts -- ART, MUS (except 275), TAI (except 275)</td>
</tr>
<tr>
<td>Group V - Applied Arts &amp; Sciences: ACC, AIM, ALH, AMS, BUS, BIS, ECE, CIS (except 110, 111, 121, 131, 151, 152, 175, 176), CST, CJS, DRF, ENT, HRA, IND, LEN, NUR, MRI, PHT, PLT, PTA, RAD, WLD</td>
</tr>
<tr>
<td>Group VI - Health/Physical Education: HED, PED</td>
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<tr>
<td>Group VII - Education: EDU</td>
</tr>
<tr>
<td>Group VIII - Personal Development: MID (except 103)</td>
</tr>
</tbody>
</table>
ASSOCIATE IN ARTS
VISUAL ARTS

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program. A minimum of 15 credit hours must consist of 200 level coursework.

<table>
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<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Pre-requisites/Notes</th>
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<tbody>
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<td><strong>Credit hours</strong></td>
<td><strong>Course Title</strong></td>
<td><strong>Pre-requisites/Notes</strong></td>
</tr>
<tr>
<td><strong>Communication Skills (Group I) - 9 credit hours</strong></td>
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</tr>
<tr>
<td>☐ ENG 111 3 3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
</tr>
<tr>
<td>☐ ENG 222 3 3</td>
<td>Expository Writing &amp; Research</td>
<td>Minimum grade of “C” in ENG 111</td>
</tr>
<tr>
<td>☐ SPE 101 3 3</td>
<td>Fundamentals of Communication</td>
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<tr>
<td>☐ OR SPE 257 3 3</td>
<td>Public Speaking</td>
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</tr>
<tr>
<td><strong>Science and Mathematics (Group II) – 10 credit hours</strong></td>
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<tr>
<td>☐ MAT 107* 3 3</td>
<td>College Algebra</td>
<td>Minimum grade of “C” in MAT 105 or equivalent</td>
</tr>
<tr>
<td>☐ OR MAT 114 3 3</td>
<td>Mathematical Reasoning</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
</tr>
<tr>
<td>☐ OR MAT 212 3 3</td>
<td>Introduction to Probability and Statistics</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
</tr>
<tr>
<td>☐ *MAT 124, 126, 225, 226, and 230 also satisfy this requirement. Other MAT courses do not.</td>
<td>Two courses selected from the Designated MTA Social Science list</td>
<td>NOTE: Courses cannot be from same discipline.</td>
</tr>
<tr>
<td>☐</td>
<td>Natural Science list</td>
<td></td>
</tr>
<tr>
<td><strong>Social Sciences (Group III) - 6 credit hours</strong></td>
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<tr>
<td>☐</td>
<td>Two courses selected from the Designated MTA Social Science list</td>
<td>NOTE: Courses cannot be from same discipline.</td>
</tr>
<tr>
<td>☐</td>
<td>Social Science list</td>
<td></td>
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<tr>
<td><strong>Fine Arts and Humanities - 34 credit hours</strong></td>
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<tr>
<td>☐ ART 105 3 3</td>
<td>Drawing I - Introductory</td>
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<tr>
<td>☐ ART 115 3 3</td>
<td>Design I</td>
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<tr>
<td>☐ HUM 101 3 3</td>
<td>World of Creativity I</td>
<td></td>
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<tr>
<td>☐ HUM 102 3 3</td>
<td>World of Creativity II</td>
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<tr>
<td>☐ ART 241 1 1</td>
<td>Portfolio</td>
<td>Permission of instructor</td>
</tr>
<tr>
<td>☐</td>
<td>One course selected from the Designated MTA Humanities list</td>
<td>NOTE: Selection cannot carry HUM department designator</td>
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<tr>
<td>☐</td>
<td>ART Elective</td>
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<tr>
<td><strong>ART electives - 18 credit hours</strong></td>
<td>Select from: ART 110, 130, 135, 137, 152, 205, 206, 207, 210, 211, 215, 230, 235, 236, 237, 239, 240, 247, 252, 253, 254, 256, or 280. (See MMCC catalog for pre-requisite information.)</td>
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<tr>
<td>☐</td>
<td>ART Elective</td>
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<td>☐</td>
<td>ART Elective</td>
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<tr>
<td><strong>Electives - credits to reach minimum of 62</strong></td>
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<td>☐ Elective</td>
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<td>☐ Elective</td>
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</table>

Students should consult with an Academic Advisor to select courses appropriate for academic and career goals. General Education Intensive and Designated MTA course lists on reverse (print version) or page two (digital version).
## GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES

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**Quantitative Reasoning:** One of the following -- MAT 107, MAT 114, or MAT 212

**Natural Science:** Two courses from the MTA list below, each from a different subject area.

**Social Science:** Two courses from the MTA list below, each from a different subject area.

**Humanities:** Two courses from the MTA list below, each from a different subject area.

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### Designated MTA courses -- each course must be completed with a minimum grade of C

<table>
<thead>
<tr>
<th>Category</th>
<th>Courses</th>
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<tbody>
<tr>
<td>English Composition</td>
<td>ENG 111</td>
</tr>
<tr>
<td>Communication</td>
<td>Either ENG 222, SPE 101, or SPE 257</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Either MAT 114, MAT 212, or one of the following: MAT 107, 124, 126, 212, 225, 226, 230</td>
</tr>
<tr>
<td>Natural Science</td>
<td>Two of the following, each from a different subject area: BIO 100, 101, 111, 112, 131, 132, 135, 138, 141, 142, 201, 203, 210, 245; CHM 105, 106, 111, 112, 241, 242, 245, 246, 255, 256; GEL 101, 112; PHY 105, 211; PSC 101, 102; SCI 200. At least one must be a laboratory science.</td>
</tr>
<tr>
<td>Social Science</td>
<td>Two of the following, each from a different subject area: ANT 170; ECO 110, 201, 202; GEG 121; HIS 211, 212, 223; POL 201, 250; PSY 101, 103, 205, 212, 240, 285; SOC 101, 200, 202, 220, 250, 289; SSC 111, 200</td>
</tr>
<tr>
<td>Humanities</td>
<td>Two of the following, each from a different subject area: ENG 112, 201, 202, 205, 206, 213, 289; FRN 101, 102; GER 101, 102; HIS 101, 102; HUM 101, 102, 183, 200, 205, 210, 225, 253; MUS 275; PHL 201, 205, 210, 220, 250; REL 111, 200, 225, 250; SPN 101, 102, 201; TAI 275</td>
</tr>
</tbody>
</table>

If necessary, additional Designated MTA courses to total or exceed 30 credit hours.

## DISTRIBUTION GROUPS

| Group I - Communication Skills: ENG (104, 110, 111, 222, 225), JOR, SPE |
| Group II - Science and Mathematics: BIO, CHM, CIS (110, 111, 121, 131, 151, 152, 175, 176), GEL, PSC, PHY, SCI; MAT |
| Group III - Social Science: ANT, ECO, GEG, HES, HIS (211, 212, 223, 251, 252), POL, PSY, SSC, SOC |
| Group IV - Humanities and Fine Arts: Humanities -- ENG (112, 201, 202, 205, 206, 211, 212, 213, 281), FRN, GER, HIS (101, 102), HUM, JPN, MUS (275), PHL, REL, SPN, TAI (275); Fine Arts -- ART, MUS (except 275), TAI (except 275) |
| Group V - Applied Arts & Sciences: ACC, AIM, ALH, AMS, BUS, BIS, ECE, CIS (except 110, 111, 121, 131, 151, 152, 175, 176), CST, CJS, DRF, ENT, HRA, IND, LEN, NUR, MRI, PHT, PLT, PTA, RAD, WLD |
| Group VI - Health/Physical Education: HED, PED |
| Group VII - Education: EDU |
| Group VIII - Personal Development: MID |
A minimum of 62 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>3 3 Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3 3 Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3 3 Public Speaking</td>
<td></td>
</tr>
<tr>
<td>MAT 105</td>
<td>3 3 Intermediate Algebra</td>
<td>Minimum grade of &quot;C&quot; in MAT 104 or equivalent</td>
</tr>
<tr>
<td>OR MAT 116</td>
<td>3 3 Business Math I</td>
<td>Minimum grade of &quot;C&quot; in MAT 105 or equivalent</td>
</tr>
<tr>
<td>SCI 200</td>
<td>3 4 Science, Technology &amp; Society</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>SSC 200</td>
<td>3 3 The Social Sciences &amp; Contemporary America</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>HUM 200</td>
<td>3 3 Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR HUM 253</td>
<td>3 3 American Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>CIS 100</td>
<td>3 3 Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>ACC 201</td>
<td>4 4 Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>ACC 205</td>
<td>3 4 Payroll Accounting</td>
<td>ACC 201 recommended</td>
</tr>
<tr>
<td>ACC 211</td>
<td>4 4 Managerial Accounting</td>
<td>Minimum grade of &quot;C&quot; in ACC 201</td>
</tr>
<tr>
<td>ACC 231</td>
<td>3 3 Principles of Cost Accounting</td>
<td>ACC 211</td>
</tr>
<tr>
<td>ACC 251</td>
<td>3 3 Tax Accounting I</td>
<td>ACC 201 recommended</td>
</tr>
<tr>
<td>ACC 252</td>
<td>3 3 Tax Accounting II</td>
<td>ACC 251</td>
</tr>
<tr>
<td>ACC 261</td>
<td>3 3 Computerized Accounting</td>
<td>CIS 130, ACC 211</td>
</tr>
<tr>
<td>ACC 280</td>
<td>2 2 Accounting Internship</td>
<td>MID 150; Complete at least 45 credit hours in the Accounting Program</td>
</tr>
<tr>
<td>BIS 264</td>
<td>3 3 Business Communications II</td>
<td>BIS 164 or ENG 111</td>
</tr>
<tr>
<td>BUS 151</td>
<td>3 3 Introduction to Business Issues</td>
<td></td>
</tr>
<tr>
<td>BUS 153</td>
<td>3 3 Business Law</td>
<td></td>
</tr>
<tr>
<td>BUS 255</td>
<td>3 3 Entrepreneurial Finance</td>
<td></td>
</tr>
<tr>
<td>CIS 130</td>
<td>3 3 Applications with Microcomputers</td>
<td>Minimum grade of &quot;C&quot; in CIS 100</td>
</tr>
<tr>
<td>MID 150</td>
<td>1 1 Career Readiness</td>
<td>Permission of the Instructor</td>
</tr>
</tbody>
</table>

A suggested sequence of courses is presented on reverse (printed version) or page two (digital version).
Suggested Sequence of Courses

FIRST SEMESTER
ACC 201
BUS 153

SECOND SEMESTER
ACC 211
BUS 255
CIS 130
BUS 151
MID 150

THIRD SEMESTER
ACC 205
ACC 251
ACC 261

FOURTH SEMESTER
ACC 231
ACC 252
ACC 280
ASSOCIATE IN APPLIED SCIENCE DEGREE
ADVANCED INTEGRATED MANUFACTURING

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 63 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Course #</th>
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<th>Pre-requisites</th>
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<tbody>
<tr>
<td><strong>First Semester (Fall) - 16 credit hours</strong></td>
<td></td>
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</tr>
<tr>
<td>☐ CIS 100</td>
<td>3</td>
<td>3</td>
<td>Introduction to Information Systems</td>
</tr>
<tr>
<td>☐ DRF 210</td>
<td>3</td>
<td>3</td>
<td>Introduction to SolidWorks</td>
</tr>
<tr>
<td>☐ MAT 170</td>
<td>3</td>
<td>3</td>
<td>Technical Math II</td>
</tr>
<tr>
<td>☐ AIM 100</td>
<td>1</td>
<td>1</td>
<td>Industrial Safety (First 8 weeks)</td>
</tr>
<tr>
<td>☐ AIM 105</td>
<td>2</td>
<td>2</td>
<td>Introduction to Advanced Integrated Manufacturing (First 8 weeks)</td>
</tr>
<tr>
<td>☐ AIM 110</td>
<td>2</td>
<td>2</td>
<td>Manufacturing Production Processes (Second 8 weeks)</td>
</tr>
<tr>
<td>☐ AIM 115</td>
<td>2</td>
<td>2</td>
<td>Manufacturing Materials (Second 8 weeks)</td>
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<td><strong>Second Semester (Winter) - 17 credit hours</strong></td>
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<tr>
<td>☐ ENG 111</td>
<td>3</td>
<td>3</td>
<td>Freshman English Composition</td>
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<tr>
<td>☐ SPE 101 OR SPE 257</td>
<td>3</td>
<td>3</td>
<td>Fundamentals of Communication</td>
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<tr>
<td>☐ MAT 170</td>
<td>3</td>
<td>3</td>
<td>Technical Math II</td>
</tr>
<tr>
<td>☐ AIM 120</td>
<td>2</td>
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<td>Manufacturing Power and Equipment Systems (First 8 weeks)</td>
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<tr>
<td>☐ AIM 125</td>
<td>2</td>
<td>2</td>
<td>Manufacturing Equipment Maintenance and Operations (First 8 weeks)</td>
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<tr>
<td>☐ AIM 130</td>
<td>2</td>
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<td>Design for Manufacturing (Second 8 weeks)</td>
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<tr>
<td>☐ AIM 135</td>
<td>2</td>
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<td>The Manufacturing Enterprise (Second 8 weeks)</td>
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<td><strong>Third Semester (Fall) - 15 credit hours</strong></td>
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<tr>
<td>☐ HUM 200 OR HUM 253</td>
<td>3</td>
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<tr>
<td>☐ SCI 200</td>
<td>3</td>
<td>4</td>
<td>Science, Technology, &amp; Society</td>
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<tr>
<td>☐</td>
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<tr>
<td><strong>Fourth Semester (Winter) - 15 credit hours</strong></td>
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<td>☐ PHY 103</td>
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<td>Group V Elective</td>
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ASSOCIATE IN APPLIED SCIENCE
AUTOMOTIVE TECHNOLOGY

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 69 credits is required to complete this program.

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<tr>
<td>ENG 111</td>
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<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with minimum grade of &quot;C&quot;</td>
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<td>SPE 101</td>
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<td>Fundamentals of Communication OR Public Speaking</td>
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<td>OR SPE 257</td>
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<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
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<td>MAT 101</td>
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<td>Basic Mathematics</td>
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<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
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<td>HUM 200</td>
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<td>3</td>
<td>Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
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<tr>
<td>OR HUM 253</td>
<td>3</td>
<td>3</td>
<td>American Culture</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
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<td>CIS 100</td>
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<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
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<tr>
<td>AMS 104</td>
<td>2</td>
<td>3</td>
<td>Basic Automotive Electricity</td>
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<tr>
<td>AMS 110</td>
<td>4.5</td>
<td>7</td>
<td>Engine Fundamentals and Overhaul</td>
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<tr>
<td>AMS 125</td>
<td>5</td>
<td>8</td>
<td>Engine Performance I</td>
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<tr>
<td>AMS 116</td>
<td>3</td>
<td>4</td>
<td>Electrical Systems I: Electrical Accessories</td>
<td>AMS 104 (may be taken concurrently) or Instructor approval</td>
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<tr>
<td>AMS 124</td>
<td>4</td>
<td>5</td>
<td>Automotive Heating &amp; Air Conditioning</td>
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<tr>
<td>AMS 126</td>
<td>5</td>
<td>8</td>
<td>Engine Performance II</td>
<td>AMS 104 and AMS 125, OR State certified in engine tune-up area</td>
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<tr>
<td>AMS 205</td>
<td>4</td>
<td>6</td>
<td>Steering &amp; Suspension Systems</td>
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<tr>
<td>AMS 206</td>
<td>4</td>
<td>6</td>
<td>Brakes</td>
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<td>AMS 223</td>
<td>4</td>
<td>6</td>
<td>Electrical Systems II: Engine Electrical Systems</td>
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<tr>
<td>AMS 214</td>
<td>4.5</td>
<td>7.5</td>
<td>Automatic Transmissions</td>
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<tr>
<td>AMS 222</td>
<td>4</td>
<td>6</td>
<td>Manual Transmissions</td>
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<tr>
<td>AMS 232</td>
<td>3</td>
<td>3</td>
<td>AMS Internship</td>
<td>MID 150; Completion of 45 credits of program with remaining courses concurrent to Co-op. Permission of the Co-op Coordinator required. Professional tools required.</td>
</tr>
<tr>
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<td>1</td>
<td>1</td>
<td>Career Readiness</td>
<td>Permission of the Instructor</td>
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</table>

Note: AMS coursework must be completed with a minimum grade of “C” to be eligible for AMS 232 Automotive Co-op.

A suggested sequence of courses is presented on reverse (printed version) or page two (digital version).
ASSOCIATE IN APPLIED SCIENCE
AUTOMOTIVE TECHNOLOGY

RECOMMENDED COURSE SEQUENCE

FIRST SEMESTER
AMS 104
AMS 110
AMS 125

SECOND SEMESTER
AMS 116
AMS 124
AMS 126
MID 150

THIRD SEMESTER
AMS 205
AMS 206
AMS 223

FOURTH SEMESTER
AMS 214
AMS 222
AMS 232

AMS 214 & 222 can be concurrent
ASSOCIATE IN APPLIED SCIENCE
BUSINESS

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 66 credits is required to complete this program.

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<th>Course Title</th>
<th>Pre-requisites</th>
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<tr>
<td>Communication Skills (Group I) - 9 credit hours</td>
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<td>ENG 111*</td>
<td>3 3 Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
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<tr>
<td></td>
<td>OR SPE 257</td>
<td>3 3 Public Speaking</td>
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<tr>
<td></td>
<td></td>
<td>OR SPE 101</td>
<td>3 3 Fundamentals of Communication</td>
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<tr>
<td>Science and Mathematics (Group II) – 6 credit hours</td>
<td></td>
<td>MAT 105</td>
<td>3 3 Intermediate Algebra</td>
<td>Minimum grade of &quot;C&quot; in MAT 104 or equivalent</td>
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<tr>
<td></td>
<td>OR MAT 116</td>
<td>3 3 Business Math I</td>
<td>Minimum grade of &quot;C&quot; in MAT 105 or equivalent</td>
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<tr>
<td></td>
<td>SCI 200</td>
<td>3 4 Science, Technology &amp; Society</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
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<tr>
<td>Social Sciences (Group III) - 6 credit hours</td>
<td></td>
<td>ECO 201</td>
<td>3 3 Principles of Economics (Macro)</td>
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<tr>
<td></td>
<td>OR ECO 202</td>
<td>3 3 Principles of Economics (Micro)</td>
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<tr>
<td></td>
<td>SSC 200</td>
<td>3 3 The Social Sciences &amp; Contemporary America</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
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<tr>
<td>Humanities and Fine Arts (Group IV) - 3 credit hours</td>
<td></td>
<td>HUM 200</td>
<td>3 3 Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td></td>
<td>OR HUM 253</td>
<td>3 3 American Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
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<tr>
<td>Applied Arts and Sciences (Group V) - 45 credit hours</td>
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<td>ACC 201</td>
<td>4 4 Financial Accounting</td>
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<td></td>
<td>ACC 211</td>
<td>4 4 Managerial Accounting</td>
<td>Minimum grade of &quot;C&quot; in ACC 201</td>
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<tr>
<td></td>
<td>BIS 264</td>
<td>3 3 Business Communications II</td>
<td>BIS 164 or ENG 111</td>
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<tr>
<td></td>
<td>BUS 122</td>
<td>3 3 Management Theory &amp; Practice</td>
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<td></td>
<td>BUS 151</td>
<td>3 3 Introduction to Business Issues</td>
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<td>BUS 153</td>
<td>3 3 Business Law</td>
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<tr>
<td></td>
<td>BUS 162</td>
<td>3 3 Principles of Marketing</td>
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<td></td>
<td>BUS 231</td>
<td>3 3 Principles of Advertising</td>
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<td></td>
<td>BUS 255</td>
<td>3 3 Entrepreneurial Finance</td>
<td>Prerequisite: ACC 201 and MAT 105. It is recommended that students also have completed MAT 116, BUS 151, and either ECO 201 or 202.</td>
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<tr>
<td></td>
<td>BUS 289</td>
<td>1 1 Business Practicum</td>
<td>Prerequisites: CIS 100, ACC 201, BUS 122, BUS 151, BUS 153, BUS 162, BUS 231, and either ECO 201 or ECO 202.</td>
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<td></td>
<td>BUS 291</td>
<td>2 2 Business Internship</td>
<td>MID 150</td>
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<tr>
<td></td>
<td>CIS 100</td>
<td>3 3 Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
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<td></td>
<td>CIS 130</td>
<td>3 3 Applications with Microcomputers</td>
<td>Minimum grade of &quot;C&quot; in CIS 100</td>
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<td>MID 150</td>
<td>1 1 Career Readiness</td>
<td>Permission of the Instructor</td>
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6 hours must come from any combination of the following courses

| | | | | |
| ACC 251 | 3 3 Tax Accounting I |
| ACC 252 | 3 3 Tax Accounting II | ACC 251 |
| BUS 225 | 3 3 International Business |
| BUS 250 | 3 3 Entrepreneurial Management |
| PSY 101 | 3 3 Introduction to General Psychology |
| BIS 140 | 3 3 Beginning Word Processing/Keyboarding |
Suggested Sequence of Courses

FIRST SEMESTER (Fall) 18 Credit Hours
BUS 122 (3)
BUS 151 (3)
CIS 100 (3)
MAT 105 or 116 (3)
BIS 140 (3)
BUS 153 (3)

SECOND SEMESTER (Winter) 17 Credit Hours
ACC 201 (4)
BUS 162 (3)
CIS 130 (3)
ENG 111 (3)
SPE 101 (3) OR SPE 257 (3)
MID 150 (1)

THIRD SEMESTER (Fall) 16 Credit Hours
ACC 211 (4)
BUS 231 (3)
ECO 201 (3) OR ECO 202 (3)
HUM 200 (3) OR HUM 253 (3)
BUS 225 (3)

FOURTH SEMESTER (Winter) 16 Credit Hours
BUS 255 (3)
BUS 289 (1)
BUS 291 (3)
BIS 264 (3)
SCI 200 (3)
SSC 200 (3)
ASSOCIATE IN APPLIED SCIENCE
BUSINESS INFORMATION SYSTEMS

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program.

Prerequisite to the Program: BIS 140 (3) Beginning Word Processing/Keyboarding OR equivalent OR concurrent.

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<th>Course #</th>
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<th>Pre-requisites</th>
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<td>ENG 111</td>
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<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
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<tr>
<td>SPE 101</td>
<td>3</td>
<td>Fundamentals of Communication</td>
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<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>Public Speaking</td>
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Science and Mathematics (Group II) – 3 credit hours
- SCI 200 3 Science, Technology & Society  
  ENG 111 and either SPE 101 or 257 (minimum grade of "C" in each)

Social Sciences (Group III) - 3 credit hours
- SSC 200 3 The Social Sciences & Contemporary America  
  ENG 111 and either SPE 101 or 257 (minimum grade of "C" in each)

Humanities and Fine Arts (Group IV) - 3 credit hours
- HUM 200 3 Modernity & Culture  
  ENG 111 and either SPE 101 or 257 (minimum grade of "C" in each)
- OR HUM 253 3 American Culture  
  ENG 111 and either SPE 101 or 257 (minimum grade of "C" in each)

Applied Arts and Sciences (Group V) - 38 credit hours
- CIS 100 3 3 Introduction to Information Systems  
  Touch keyboarding skills recommended
- BIS 120 3 3 Office Mathematics
- BIS 127 4 4 Applied Office Accounting  
  BIS 120
- BIS 136 3 3 Terminology and Proofreading  
  BIS 164, ENG 111 may be taken concurrently
- BIS 142 3 3 Intermediate Word Processing/Keyboarding  
  BIS 140 or equivalent
- BIS 164 3 3 Business Communications I  
  Recommended concurrent enrollment in BIS 140 or CIS 100 or knowledge of correct keyboarding techniques
- BIS 200 3 3 Advanced Word Processing Applications  
  BIS 140 or equivalent, CIS 100 recommended
- BIS 230 3 3 Written Correspondence I  
  ENG 111, CIS 100, BIS 136, BIS 142, BIS 164
- BIS 240 3 3 Advanced Word Processing/Keyboarding  
  ENG 111, BIS 136, BIS 142, BIS 200
- BIS 250 3 3 Records Management  
  BIS 140 or equivalent, CIS 100 recommended
- BIS 260 3 3 Business Information Systems Internship  
  MID 150; In order to be placed in a training site and enrolled in BIS 260, the student should have completed the first three semesters of the program and must have approval of the BIS Co-op instructor and the MMCC Co-op Coordinator
- BIS 264 3 3 Business Communications II  
  BIS 164 or ENG 111
- MID 150 1 1 Career Readiness  
  Permission of the Instructor

A minimum of 9 hours must come from a selected track

General BIS Track
- BUS 151 3 3 Introduction to Business Issues
- CIS 130 3 3 App. with Microcomputers  
  CIS 100
- BIS 234 3 3 Written Correspondence II  
  BIS 200, BIS 230, BIS 240
- BIS 254 3 3 Office Procedures

Medical Office Track
- ALH 100 2 2 Medical Terminology
- ALH 112 3 3 Insurance Billing  
  ALH 100
- BIS 126 3 3 Introduction to Medical Transcription  
  BIS 140 or competency. Corequisite: ALH 100 recommended
- BIS 236 3 3 Medical Transcription I  
  ALH 100, BIS 142, BIS 230
- BIS 255 3 3 Medical Office Procedures  
  BIS 140, CIS 100

Legal Office Track
- BIS 138 3 3 Basic Legal Terminology  
  BIS 140 or equivalent or concurrent enrollment, BIS 164 recommended or concurrent enrollment
- BIS 238 3 3 Legal Transcription  
  BIS 138, BIS 200, BIS 230, BIS 240
- BUS 153 3 3 Business Law
- BIS 254 3 3 Office Procedures
Suggested Sequence of Courses

FIRST SEMESTER
BIS 120
CIS 100
BIS 164

SECOND SEMESTER
BIS 136
BIS 142
BIS 200
MID 150

THIRD SEMESTER
BIS 230
BIS 240
BIS 250
BIS 264

FOURTH SEMESTER
BIS 127
BIS 234
BIS 254
BIS 260
ASSOCIATE IN APPLIED SCIENCE DEGREE:  
COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGY

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program. Suggested sequence on reverse (print) or page2 (digital).

<table>
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<th>Credit hours</th>
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<th>Course Title</th>
<th>Pre-requisites</th>
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<td><strong>Communication Skills (Group I) - 6 credit hours</strong></td>
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<tr>
<td>□ ENG 111</td>
<td>3 3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
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<td>□ SPE 101</td>
<td>3 3</td>
<td>Fundamentals of Communication</td>
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<tr>
<td>OR SPE 257</td>
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<td>Public Speaking</td>
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**Science and Mathematics (Group II) – 10-13 credit hours**

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<td>Technical Math II</td>
<td>Minimum grade of &quot;C&quot; in MAT 101 OR minimum grade of &quot;C&quot; in MAT 102 OR equivalent</td>
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<tr>
<td>OR MAT 124</td>
<td>5 5</td>
<td>Pre-Calculus</td>
<td>Minimum grade of &quot;C&quot; in MAT 105 OR equivalent</td>
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<td>□ SCI 200</td>
<td>3 4</td>
<td>Science, Technology, &amp; Society</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
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<tr>
<td>□ PHY 103</td>
<td>4 5</td>
<td>Applied Physics</td>
<td>Corequisite: MAT 104 OR MAT 170</td>
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<tr>
<td>OR PHY 105</td>
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<td>General Physics I</td>
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**Social Sciences (Group III) - 3 credit hours**

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<th>Pre-requisites</th>
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<td>□ SSC 200</td>
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<td>The Social Sciences &amp; Contemporary America</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
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**Humanities and Fine Arts (Group IV) - 3 credit hours**

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<th>Course Title</th>
<th>Pre-requisites</th>
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<tr>
<td>□ HUM 200</td>
<td>3 3</td>
<td>Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR HUM 253</td>
<td>3 3</td>
<td>American Culture</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
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**Applied Arts and Sciences (Group V) - 38 credit hours**

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<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ CIS 100</td>
<td>3 3</td>
<td>Introduction to Information Processing Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>□ DRF 101</td>
<td>2 2</td>
<td>Technical Drawing</td>
<td>DRF 101 Technical Drawing; IND 101 recommended</td>
</tr>
<tr>
<td>□ DRF 105</td>
<td>3 3</td>
<td>Intro to Geometric Dimensioning &amp; Tolerancing</td>
<td>DRF 101 &amp; DRF 120</td>
</tr>
<tr>
<td>□ DRF 120</td>
<td>3 3</td>
<td>Introduction to AutoCAD</td>
<td>DRF 101 &amp; DRF 120</td>
</tr>
<tr>
<td>□ DRF 201</td>
<td>3 3</td>
<td>Mechanical Detail Drafting w/CAD</td>
<td>DRF 101 &amp; DRF 210</td>
</tr>
<tr>
<td>□ DRF 210</td>
<td>3 3</td>
<td>Introduction to SolidWorks</td>
<td>MID 150; Minimum grade of “B” in DRF 101, DRF 105, DRF 120, DRF 201, DRF 210, IND 101, IND 113, and IND 116 OR successful completion of competency exam with minimum score of 83%</td>
</tr>
<tr>
<td>□ DRF 211</td>
<td>3 3</td>
<td>Advanced SolidWorks Applications</td>
<td>DRF 210</td>
</tr>
<tr>
<td>□ DRF 250</td>
<td>2 2</td>
<td>Drafting/CAD Internship</td>
<td>MID 150; Minimum grade of “B” in DRF 101, DRF 105, DRF 120, DRF 201, DRF 210, IND 101, IND 113, and IND 116 OR successful completion of competency exam with minimum score of 83%</td>
</tr>
<tr>
<td>□ DRF 280</td>
<td>3 3</td>
<td>CAD Program and Software Certification</td>
<td>Minimum grade of “B” in DRF 101, DRF 105, DRF 120, DRF 201, DRF 210, IND 101, IND 113, and IND 116 OR successful completion of competency exam with minimum score of 83%</td>
</tr>
<tr>
<td>□ IND 101</td>
<td>4 4</td>
<td>Basic Machine Shop Practices</td>
<td></td>
</tr>
<tr>
<td>□ IND 113</td>
<td>4 4</td>
<td>CNC Machining</td>
<td></td>
</tr>
<tr>
<td>□ IND 116</td>
<td>4 4</td>
<td>CNC Programming</td>
<td>IND 101, IND 113, minimum grade of “C” in MAT 105 OR MAT 170 OR equivalent</td>
</tr>
<tr>
<td>□ MID 150</td>
<td>1 1</td>
<td>Career Readiness</td>
<td>Permission of the Instructor</td>
</tr>
</tbody>
</table>

**Electives – 2-5 credit hours from the following courses:**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ DRF 220</td>
<td>3 3</td>
<td>Introduction to SoftPlan</td>
<td></td>
</tr>
<tr>
<td>□ IND 140</td>
<td>3 3</td>
<td>Metallurgy and Industrial Metals</td>
<td></td>
</tr>
<tr>
<td>□ WLD or PLT Elective</td>
<td>Any WLD or PLT Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This degree is not designed to provide transfer into a four-year Bachelor’s Degree program. Students should meet with an MMCC Academic Advisor if interested in transferring to a four-year college or university.
ASSOCIATE IN APPLIED SCIENCE DEGREE:
COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGY

Suggested Sequence of Courses

FIRST SEMESTER (Fall) 15 Credit Hours
DRF 101 (3)
DRF 120 (3)
IND 101 (4)
CIS 100 (3)
MAT 170 (3)

SECOND SEMESTER (Winter) 16 Credit Hours
DRF 201 (3)
DRF 210 (3)
ELECTIVE (3)
ENG 111 (3)
SPE 101 (3)
MID 150 (1)

THIRD SEMESTER (Fall) 15 Credit Hours
DRF 105 (2)
DRF 211 (3)
IND 113 (4)
HUM 200 (3) OR HUM 253 (3)
SCI 200 (3)

FOURTH SEMESTER (Winter) 16 Credit Hours
DRF 280 (3)
DRF 250 (2)
IND 116 (4)
SSC 200 (3)
PHY 103 (4)
### ASSOCIATE IN APPLIED SCIENCE

**COMPUTER INFORMATION SYSTEMS**

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication Skills (Group I) - 6 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG 111</td>
<td>3</td>
<td>3</td>
<td>Freshman English Composition</td>
</tr>
<tr>
<td></td>
<td>SPE 101</td>
<td>3</td>
<td>3</td>
<td>Fundamentals of Communication</td>
</tr>
<tr>
<td></td>
<td>OR SPE 257</td>
<td>3</td>
<td>3</td>
<td>Public Speaking</td>
</tr>
<tr>
<td><strong>Science and Mathematics (Group II) – 6 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAT 105</td>
<td>3</td>
<td>3</td>
<td>Intermediate Algebra</td>
</tr>
<tr>
<td></td>
<td>SCI 200</td>
<td>3</td>
<td>4</td>
<td>Science, Technology &amp; Society</td>
</tr>
<tr>
<td><strong>Social Sciences (Group III) - 3 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SSC 200</td>
<td>3</td>
<td>3</td>
<td>The Social Sciences &amp; Contemporary America</td>
</tr>
<tr>
<td><strong>Humanities and Fine Arts (Group IV) - 3 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HUM 200</td>
<td>3</td>
<td>3</td>
<td>Modernity &amp; Culture</td>
</tr>
<tr>
<td></td>
<td>OR HUM 253</td>
<td>3</td>
<td>3</td>
<td>American Culture</td>
</tr>
<tr>
<td><strong>Applied Arts and Sciences (Group V) - 46 credit hours</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>ACC 201</td>
<td>4</td>
<td>4</td>
<td>Financial Accounting</td>
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<tr>
<td></td>
<td>BIS 264</td>
<td>3</td>
<td>3</td>
<td>Business Communications II</td>
</tr>
<tr>
<td></td>
<td>CIS 100</td>
<td>3</td>
<td>3</td>
<td>Introduction to Information Systems</td>
</tr>
<tr>
<td></td>
<td>CIS 110</td>
<td>3</td>
<td>3</td>
<td>Programming Logic I</td>
</tr>
<tr>
<td></td>
<td>CIS 135</td>
<td>3</td>
<td>3</td>
<td>Introduction to Website Design</td>
</tr>
<tr>
<td></td>
<td>CIS 155</td>
<td>3</td>
<td>3</td>
<td>Operating Systems</td>
</tr>
<tr>
<td></td>
<td>CIS 170</td>
<td>3</td>
<td>3</td>
<td>Networking Essentials</td>
</tr>
<tr>
<td></td>
<td>CIS 221</td>
<td>3</td>
<td>3</td>
<td>Computers In Business</td>
</tr>
<tr>
<td></td>
<td>MID 150</td>
<td>1</td>
<td>1</td>
<td>Career Readiness</td>
</tr>
<tr>
<td><strong>Students must complete ONE of the following CIS concentrations:</strong></td>
<td></td>
<td></td>
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<tr>
<td>Networking</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>CIS 190</td>
<td>3</td>
<td>3</td>
<td>Cisco I</td>
</tr>
<tr>
<td></td>
<td>CIS 195</td>
<td>3</td>
<td>3</td>
<td>Cisco II</td>
</tr>
<tr>
<td></td>
<td>CIS 290</td>
<td>3</td>
<td>3</td>
<td>Cisco III</td>
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<td></td>
<td>CIS 295</td>
<td>3</td>
<td>3</td>
<td>Cisco IV</td>
</tr>
<tr>
<td>Programming</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIS 125</td>
<td>3</td>
<td>3</td>
<td>Database Systems</td>
</tr>
<tr>
<td></td>
<td>CIS 260</td>
<td>3</td>
<td>3</td>
<td>Systems Analysis</td>
</tr>
<tr>
<td></td>
<td>CIS 175</td>
<td>3</td>
<td>3</td>
<td>Computer Programming I</td>
</tr>
<tr>
<td></td>
<td>CIS 276</td>
<td>3</td>
<td>3</td>
<td>Computer Programming II</td>
</tr>
<tr>
<td><strong>Students must complete 6 elective hours of additional CIS coursework.</strong></td>
<td></td>
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<tr>
<td></td>
<td>CIS Elective</td>
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<tr>
<td></td>
<td>CIS Elective</td>
<td></td>
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</tr>
</tbody>
</table>
ASSOCIATE IN APPLIED SCIENCE
CRIMINAL JUSTICE - CORRECTIONS

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program.
A minimum of 15 credit hours must consist of 200 level coursework.

Credit hours

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Course #</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact/Billing Hours</td>
<td>ENG 111</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
</tr>
<tr>
<td></td>
<td>ENG 222</td>
<td>Expository Writing &amp; Research</td>
<td>Minimum grade of “C” in ENG 111</td>
</tr>
<tr>
<td></td>
<td>SPE 101</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>Public Speaking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Skills (Group I) - 9 credit hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAT 105</td>
<td>Intermediate Algebra</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
</tr>
<tr>
<td></td>
<td>SCI 200</td>
<td>Science, Technology &amp; Society</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of “C” in each)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group II Elective</td>
<td></td>
</tr>
<tr>
<td>Science and Mathematics (Group II) – 9 credit hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences (Group III) – 9 credit hours</td>
<td></td>
<td>Courses must be taken in more than one discipline with at least 3 credits at the 200 level.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Group III Elective</td>
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<tr>
<td></td>
<td></td>
<td>Group III Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group III Elective</td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts (Group IV) - 9 credit hours</td>
<td></td>
<td>Courses must be taken in more than one discipline with at least one at the 200-level.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Only three credits allowed from Fine Arts classes.</td>
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<tr>
<td></td>
<td></td>
<td>Group IV Elective</td>
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<td></td>
<td></td>
<td>Group IV Elective</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Group IV Elective</td>
<td></td>
</tr>
<tr>
<td>Applied Arts and Sciences (Group V) - 12-18 credit hours</td>
<td></td>
<td>Select one of the following concentration tracks:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIS 100</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group IV Elective</td>
<td></td>
</tr>
<tr>
<td>State Corrections</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>CJS 220</td>
<td>Intro to Corrections</td>
<td></td>
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<tr>
<td></td>
<td>CJS 221</td>
<td>Legal Issues in Corrections</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CJS 222</td>
<td>Corr. Facilities and Institutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CJS 223</td>
<td>Client Growth &amp; Dev. in Corr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CJS 224</td>
<td>Client Relations in Corrections</td>
<td></td>
</tr>
<tr>
<td>Local Detention</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>CJS 231</td>
<td>Local Detention Academy I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CJS 232</td>
<td>Local Detention Academy II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CJS 233</td>
<td>Local Detention Academy III</td>
<td></td>
</tr>
<tr>
<td>Elective (8-14) Choose from Group III, IV, and VI (PED 255 recommended). OTHER GROUP CREDITS ARE NOT ELIGIBLE</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Group III, IV, or VI Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group III, IV, or VI Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group III, IV, or VI Elective</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Prior to entering the Criminal Justice Corrections Programs, Students must meet with an advisor to assure that the student meets the minimum standards set by the Michigan Department of Corrections (MDOC) and or the Michigan Sheriffs Coordinating and Training Council (MSCTC)

Distribution Group course lists and General Education requirements on reverse (print version) or page two (digital version)
ASSOCIATE IN APPLIED SCIENCE
CRIMINAL JUSTICE - CORRECTIONS

DISTRIBUTION GROUPS

All regular college courses offered by Mid Michigan Community College which apply toward associate degrees and certificate programs are arranged into Distribution Groups. Many of the programs specify a certain number of prescribed and elective courses in the various groups. The groups are as follows:

Group I - Communication Skills
English 104, 110, 111, 222, 225, Journalism, Speech

Group II - Science and Mathematics
Mathematics: Mathematics
Natural Science: Biology, Environmental Science
Physical Science: Chemistry, Computer Science (CIS 110, 111, 121, 131, 151, 152, 175, 176), Geology, Physical Science, Physics, Science

Group III - Social Science
Anthropology, Economics, Geography, Human Environmental Studies, History (211, 212, 223, 251, 252), Political Science, Psychology, Social Science, Sociology

Group IV - Humanities and Fine Arts
Fine Arts: Art, Music, Theatre (except MUS 275, TAI 275)
Humanities: English 112, 201, 202, 205, 206, 211, 212, 213, 281, French, German, History 101, 102, Humanities, Japanese, MUS 275, Native American Language, Philosophy, Religion, Spanish, TAI 275

Group V - Applied Arts & Sciences

Group VI - Health/Physical Education
Health Education, Physical Education

Group VII - Education
Elementary Education, Secondary Education

Group VIII - Personal Development
MID Courses

GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE OF APPLIED SCIENCE DEGREES

LEVEL I: CIS 100, ENG 111, MAT (as specified on the degree) & either SPE 101 or 257
LEVEL II: HUM 200/253, SCI 200, and SSC 200 or their respective equivalents.
* SCI 200 -or- 8 hrs in Science; 1 of which is a natural science & 1 in physical science (one class w/lab required)
* SSC 200 -or- 9 hrs in 2 Social Science disciplines.
* HUM 200/253 -or- 9 credit hours in Humanities and Fine Arts disciplines. Courses must be taken in more than one discipline with at least one course at the 200-level. Only 3 credits allowed from Fine Arts Classes.

Students who transfer to MMCC after completing a degree at an accredited institution will be given the following exemptions: 1. From a Two-Year Institution: Students transferring to MMCC with a two-year degree from an accredited institution will be exempt from 100 Level General Education requirements with the exception of math. 200 Level requirements will be determined in the transcript evaluation process. 2. From a Four-Year Institution: Students transferring to MMCC with a four-year degree from an accredited institution will be exempt from both the 100 and 200 Level General Education requirements with the exception of math.
ASSOCIATE IN APPLIED SCIENCE
CRIMINAL JUSTICE - PRE-SERVICE

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 63 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG 111</td>
<td>3 3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td></td>
<td>SPE 101</td>
<td>3 3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OR SPE 257</td>
<td>3 3</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>Science and Mathematics (Group II) - 6 credit hours</td>
<td>MAT 105</td>
<td>3 3</td>
<td>Intermediate Algebra</td>
<td>Minimum grade of &quot;C&quot; in MAT 104 or equivalent</td>
</tr>
<tr>
<td></td>
<td>SCI 200</td>
<td>3 4</td>
<td>Science, Technology &amp; Society</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>Social Sciences (Group III) - 3 credit hours</td>
<td>SSC 200</td>
<td>3 3</td>
<td>The Social Sciences &amp; Contemporary America</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>Humanities and Fine Arts (Group IV) - 3 credit hours</td>
<td>HUM 200</td>
<td>3 3</td>
<td>Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td></td>
<td>OR HUM 253</td>
<td>3 3</td>
<td>American Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>Applied Arts and Sciences (Group V) – 42 credit hours</td>
<td>CIS 100</td>
<td>3 3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td></td>
<td>CJS 200</td>
<td>3 3</td>
<td>Intro to Law Enforcement and Criminal Justice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CJS 201</td>
<td>3 3</td>
<td>Criminal Law for Police Officers</td>
<td>CJS 200</td>
</tr>
<tr>
<td></td>
<td>CJS 215</td>
<td>21</td>
<td>Police Academy – Kirtland Community College or Delta College</td>
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<tr>
<td>Complete 4 of the following 5 courses</td>
<td>CJS 202</td>
<td>3 3</td>
<td>Juvenile Law &amp; Procedures</td>
<td>CJS 200</td>
</tr>
<tr>
<td></td>
<td>CJS 203</td>
<td>3 3</td>
<td>Fundamentals of Supervision &amp; Management in Criminal Justice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CJS 204</td>
<td>3 3</td>
<td>Criminal Investigation</td>
<td>CJS 201</td>
</tr>
<tr>
<td></td>
<td>CJS 205</td>
<td>3 3</td>
<td>Evidence and the Police Officer</td>
<td>CJS 201</td>
</tr>
<tr>
<td></td>
<td>CJS 206</td>
<td>3 3</td>
<td>Police Patrol Operations</td>
<td>CJS 200</td>
</tr>
<tr>
<td>Health and Physical Education (Group VI) - 3 credit hours</td>
<td>PED 255</td>
<td>3 3</td>
<td>Physical Training</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Prior to entering Law Enforcement programs, students must meet with an advisor to assure that the student meets the minimum standards set by Michigan Commission on Law Enforcement Standards (MCOLES). After completion of the CJS associate program, students take and pass the MCOLES pre-employment reading/writing test and a physical skills test before entering a college MCOLES approved Police Academy.
ASSOCIATE IN APPLIED SCIENCE
EARLY CHILDHOOD EDUCATION

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Course #</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Skills (Group I) - 6 credit hours</td>
<td>ENG 111 3 3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td></td>
<td>SPE 101 3 3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257 3 3</td>
<td>Public Speaking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science and Mathematics (Group II) – 6 credit hours</td>
<td>MAT 101 3 3</td>
<td>Basic Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCI 200 3 4</td>
<td>Science, Technology &amp; Society</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>Social Sciences (Group III) – 9 credit hours</td>
<td>PSY 101 3 3</td>
<td>Intro to Psychology</td>
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<tr>
<td></td>
<td>PSY 212 3 3</td>
<td>Developmental Psychology</td>
<td>PSY 101</td>
</tr>
<tr>
<td></td>
<td>SSC 200 3 3</td>
<td>The Social Sciences &amp; Contemporary America</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR Select ONE of:</td>
<td>ANT 170, POL 201, SOC 101, SOC 250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts (Group IV) - 3 credit hours</td>
<td>HUM 200 3 3</td>
<td>Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR HUM 253 3 3</td>
<td>American Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
<td></td>
</tr>
<tr>
<td>Applied Arts and Sciences (Group V) - 36 credit hours</td>
<td>CIS 100 3 3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td></td>
<td>ECE 101 4 4</td>
<td>Intro to Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECE 112 4 5</td>
<td>Infancy</td>
<td>Co-requisite: ECE 101 or permission of the ECE Coordinator</td>
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<tr>
<td></td>
<td>ECE 113 4 5</td>
<td>Early Childhood</td>
<td>Pre-requisite: ECE 101 and ECE 112, or permission of the ECE Coordinator</td>
</tr>
<tr>
<td></td>
<td>ECE 114 4 5</td>
<td>Interacting with Children, Parent/Adult Child Relations</td>
<td>Pre-requisite: ECE 101 and ECE 112</td>
</tr>
<tr>
<td></td>
<td>ECE 201 3 4</td>
<td>Guidance &amp; Implementation of Programs for Young Children</td>
<td>Pre-requisite: ECE 113 and ECE 114</td>
</tr>
<tr>
<td></td>
<td>ECE 202 3 4</td>
<td>Creative Development of the Child</td>
<td>Pre-requisite: ECE 113 and ECE 114</td>
</tr>
<tr>
<td></td>
<td>ECE 206 3 4</td>
<td>Parent, School &amp; Community Involvement</td>
<td>Pre-requisite: ECE 113 and ECE 114</td>
</tr>
<tr>
<td></td>
<td>ECE 207 4 7</td>
<td>Early Childhood Education Practicum</td>
<td>Pre-requisites: ECE 201, ECE 202, ECE 206 and ENG 111</td>
</tr>
<tr>
<td></td>
<td>ECE 208 4 4</td>
<td>Early Childhood Education Administration</td>
<td>Pre-requisites: ECE 201, ECE 202, ECE 206 and ENG 111, or permission of the ECE Coordinator</td>
</tr>
<tr>
<td>Elective – 2-3 credit hours</td>
<td>Recommended: ART 110, ART 245, ECE 150, EDU 107, ENG 222, PSY 281. Neither ENG 104 nor ENG 110 can be used as electives.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All courses listed on this program guide must be completed with a minimum grade of “C”. ECE courses require students to show validation of NO evidence of Child Abuse or Neglect per Public Act 68 of 1993 by third week of class. Students must successfully pass ICHAT and National Sex Offender Registry background searches.
Suggested Sequence of ECE Courses

FIRST SEMESTER
ECE 101
ECE 112

SECOND SEMESTER
ECE 113
ECE 114

THIRD SEMESTER
ECE 201
ECE 202
ECE 206

FOURTH SEMESTER
ECE 207
ECE 208
ASSOCIATE IN APPLIED SCIENCE:  
GRAPHIC DESIGN

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for 
consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 66 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Pre-requisites</th>
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</thead>
<tbody>
<tr>
<td><strong>Communication Skills (Group I) - 6 credit hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111 3 3 Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
<td></td>
</tr>
<tr>
<td>OR SPE 101 3 3 Fundamentals of Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR SPE 257 3 3 Public Speaking</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Science and Mathematics (Group II) – 6 credit hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 101 3 3 Basic Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCI 200 3 4 Science, Technology &amp; Society</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
<td></td>
</tr>
<tr>
<td><strong>Social Sciences (Group III) - 3 credit hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSC 200 3 3 The Social Sciences &amp; Contemporary America</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
<td></td>
</tr>
<tr>
<td><strong>Humanities and Fine Arts (Group IV) - 42 credit hours</strong></td>
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</tr>
<tr>
<td>HUM 101 3 3 World of Creativity I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 102 3 3 World of Creativity II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 105 3 3 Drawing I - Introductory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 110 3 3 Basic Photography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 115 3 3 Design I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 205 3 3 Drawing II</td>
<td>ART 105</td>
<td></td>
</tr>
<tr>
<td>ART 215 3 3 Design II</td>
<td>ART 115</td>
<td></td>
</tr>
<tr>
<td>ART 130 3 3 Painting I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 135 3 3 Graphic Design I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 235 3 3 Graphic Design II</td>
<td>ART 135</td>
<td></td>
</tr>
<tr>
<td>ART 236 3 3 Graphic Design III</td>
<td>ART 235</td>
<td></td>
</tr>
<tr>
<td>ART 211 3 3 Page Layout I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 239 3 3 Page Layout II</td>
<td>ART 211</td>
<td></td>
</tr>
<tr>
<td>ART 152 3 3 Introduction to Website Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR CIS 135</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 240 3 3 Studio Problems in Graphic Design</td>
<td>ART 110, 130, 205, 215, 236, 239</td>
<td></td>
</tr>
<tr>
<td><strong>Elective – 6 credit hours: Choose TWO from the following:</strong></td>
<td></td>
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</tr>
<tr>
<td>ART 210 3 3 Illustration</td>
<td>ART 235, ART 205</td>
<td></td>
</tr>
<tr>
<td>ART 237 3 3 Photography II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 230 3 3 Painting II</td>
<td>ART 110</td>
<td></td>
</tr>
<tr>
<td>ART 137 3 3 Digital Photography</td>
<td>ART 130</td>
<td></td>
</tr>
<tr>
<td>ART 206 3 3 Comic Book &amp; Graphic Novel Illustration</td>
<td>ART 105</td>
<td></td>
</tr>
<tr>
<td>ART 207 3 3 Comic Book &amp; Graphic Novel Illustration II</td>
<td>ART 206</td>
<td></td>
</tr>
<tr>
<td>ART 247 3 3 Contemporary Photography</td>
<td>ART 110, 137</td>
<td></td>
</tr>
<tr>
<td>ART 252 3 3 Website Design II</td>
<td>ART 152 or CIS 135</td>
<td></td>
</tr>
<tr>
<td>ART 253 3 3 Flash Fundamentals</td>
<td>CIS 100</td>
<td></td>
</tr>
<tr>
<td>ART 254 3 3 Motion Graphics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 281 3 3 Internship I</td>
<td>Permission of the Internship Coordinator</td>
<td></td>
</tr>
<tr>
<td>BUS 231 3 3 Principles of Advertising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 100 3 3 Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
<td></td>
</tr>
<tr>
<td>DRF 120 3 3 Introduction to AutoCAD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Suggested sequence on reverse (print) /page two (electronic)
ASSOCIATE IN APPLIED SCIENCE:
GRAPHIC DESIGN

Graphic Design ART Course Sequencing Schedule

FIRST SEMESTER (Fall)
ART 105 3  Drawing I - Introductory
ART 115 3  Design I
ART 135 3  Graphic Design I

SECOND SEMESTER (Winter)
ART 205 3  Drawing II
ART 215 3  Design II
ART 235 3  Graphic Design II
ART 211 3  Page Layout I

THIRD SEMESTER (Fall)
ART 110 3  Basic Photography
ART 130 3  Painting I
ART 236 3  Graphic Design III
ART 239 3  Page Layout II
Elective 3  Choose one elective from the list below  
(Courses can be taken in any available semester.)

FOURTH SEMESTER (Winter)
ART 240 3  Studio Problems in Graphic Design
ART 152 3  Introduction to Website Design
OR CIS 135 3  Introduction to Website Design
Elective 3  Choose one elective from the list below  
(Courses can be taken in any available semester.)

Elective choices
ART 210 3  Illustration
ART 237 3  Photography II
ART 230 3  Painting II
ART 137 3  Digital Photography
ART 206 3  Comic Book & Graphic Novel Illustration
ART 247 3  Contemporary Photography
ART 252 3  Website Design II
ART 253 3  Flash Fundamentals
ART 254 3  Motion Graphics
ART 281 3  Internship I
BUS 231 3  Principles of Advertising
DRF 120 3  Introduction to AutoCAD
ASSOCIATE IN APPLIED SCIENCE
HEATING/REFRIGERATION/AIR CONDITIONING

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 69 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
</table>
| Communication Skills (Group I) - 9 credit hours
| ☐ ENG 111* | 3 3 | Freshman English Composition | Placement into ENG 111 or ENG 110 with a minimum grade of "C" |
| ☐ SPE 101 | 3 3 | Fundamentals of Communication |
| OR SPE 257 | 3 3 | Public Speaking |
| Science and Mathematics (Group II) – 10-13 credit hours
| ☐ SCI 200 | 3 4 | Science, Technology & Society | ENG 111 and either SPE 101 or 257 (minimum grade of "C" in each) |
| ☐ MAT 170 | 3 3 | Technical Mathematics II | Minimum grade of "C" in MAT 101 OR equivalent |
| OR MAT 124 | 5 5 | Precalculus * | Minimum grade of "C" in MAT 105 OR equivalent |
| ☐ PHY 103 | 4 5 | Applied Physics | Co-requisite: MAT 104 or MAT 170 |
| OR PHY 105 | 5 6 | Introductory College Physics I * | Co-requisite: MAT 124 OR equivalent |
| Social Sciences (Group III) - 3 credit hours
| ☐ SSC 200 | 3 3 | Social Sciences & Contemporary America | ENG 111 and either SPE 101 or 257 (minimum grade of "C" in each) |
| Humanities and Fine Arts (Group IV) - 3 credit hours
| ☐ HUM 200 | 3 3 | Modernity & Culture | ENG 111 and either SPE 101 or 257 (minimum grade of "C" in each) |
| OR HUM 253 | 3 3 | American Culture | ENG 111 and either SPE 101 or 257 (minimum grade of "C" in each) |
| Applied Arts and Sciences (Group V) - 47 credit hours
| ☐ CIS 100 | 3 3 | Introduction to Information Systems | Touch keyboarding skills recommended |
| ☐ DRF 120 | 3 4.5 | Introduction to AutoCAD |
| ☐ HRA 102 | 3 4 | Refrigeration Fundamentals |
| ☐ HRA 104 | 3 4 | Residential Refrigeration | HRA 102 |
| ☐ HRA 105 | 3 4 | Hydronics | HRA 106 |
| ☐ HRA 106 | 3 4 | Heating Fundamentals |
| ☐ HRA 108 | 3 4 | Heating Systems | HRA 106, HRA 116 |
| ☐ HRA 116 | 3 4 | Fundamentals of Electricity |
| ☐ HRA 198 | 1 1 | EPA Refrigerant Handler Certification |
| ☐ HRA 204 | 3 4 | Light Commercial Refrigeration | HRA 102 |
| ☐ HRA 205 | 2 3 | Motors & Controls | HRA 116 |
| ☐ HRA 215 | 3 4 | HRA Controls | HRA 116 |
| ☐ HRA 220 | 2 2 | Commercial Refrigeration Design | Co-requisite: HRA 204 |
| ☐ HRA 223 | 3 3 | Residential HVAC Load Determination | HRA 108 |
| ☐ HRA 225 | 3 3 | Residential HVAC Distribution/Design | Co-requisite: HRA 223 |
| ☐ HRA 240 | 3 4 | Advanced Commercial Refrigeration | HRA 104, HRA 116, HRA 204 |
| ☐ HRA 285 | 2 2 | HRA Internship | MID 150; Minimum of 12 credits in HRA |
| ☐ MID 150 | 1 1 | Career Internship | Permission of the Instructor |

* Recommended for students transferring to Ferris State University
## HRA Course Sequencing Schedule

### Fast Track – Fall Start
**(Day Classes)**
- **Fall Semester**
  - HRA 116 (3) credits
  - HRA 205 (2) credits
  - HRA 106 (3) credits
  - HRA 108 (3) credits
  - HRA 223 (3) credits
  - MID 150 (1) credit
  - Total (15) credits

- **Winter Semester**
  - HRA 225 (3) credits
  - HRA 105 (3) credits
  - HRA 102 (3) credits
  - HRA 104 (3) credits
  - HRA 285 (2) credits
  - HRA 204 (3) credits
  - Total (17) credits

- **Spring Semester**
  - HRA 198 (1) credits
  - HRA 220 (2) credits
  - HRA 215 (3) credits
  - HRA 240 (3) credits
  - Total (9) credits
ASSOCIATE IN APPLIED SCIENCE
MAGNETIC RESONANCE IMAGING

In Collaboration with Michigan College Online

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 71 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
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<tbody>
<tr>
<td>Course #</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CIS 100</td>
<td>3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
</tr>
<tr>
<td>ALH 100</td>
<td>2</td>
<td>Medical Terminology</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
</tr>
<tr>
<td>MAT 105</td>
<td>3</td>
<td>Intermediate Algebra</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
</tr>
<tr>
<td>PHY 101</td>
<td>3</td>
<td>Introductory Physics</td>
<td>NOTE: Students who have completed RAD 110 as part of the Radiography program may substitute RAD 110 for PHY 101.</td>
</tr>
<tr>
<td>BIO 138</td>
<td>6</td>
<td>Human Anatomy and Physiology</td>
<td>BIO 101 (minimum grade of C)</td>
</tr>
<tr>
<td>OR BIO 141</td>
<td>4</td>
<td>Anatomy &amp; Physiology I AND</td>
<td>BIO 101 (minimum grade of C) or equivalent</td>
</tr>
<tr>
<td>OR BIO 142</td>
<td>4</td>
<td>Anatomy &amp; Physiology II</td>
<td>BIO 141</td>
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</table>

Completion of BIO 141 and BIO 142 is recommended to students intending to transfer to a four-year institution.

Additional Program Requirements - 12 credit hours

<table>
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<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
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<tr>
<td>Course #</td>
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</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
<td>Fundamentals of Communication</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>Public Speaking</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>PSY 101</td>
<td>3</td>
<td>Introduction to General Psychology</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>SSC 200</td>
<td>3</td>
<td>The Social Sciences &amp; Contemporary America</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>HUM 200</td>
<td>3</td>
<td>Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR HUM 253</td>
<td>3</td>
<td>American Culture</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
</tbody>
</table>

Magnetic Resonance Imaging Coursework – 39 credit hours

First Semester (Spring) [Semester names vary between institutions]

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
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<tbody>
<tr>
<td>Course #</td>
<td></td>
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<tr>
<td>MRI 200</td>
<td>1</td>
<td>Professional Prospectus</td>
<td>Admission to the MRI program</td>
</tr>
<tr>
<td>MRI 260</td>
<td>3</td>
<td>MRI Pre-Clinical Preparation</td>
<td>MRI 200</td>
</tr>
<tr>
<td>MRI 241</td>
<td>3</td>
<td>Applied Sectional Anatomy</td>
<td>MRI 200</td>
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</table>

Second Semester (Fall)

<table>
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<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
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<tbody>
<tr>
<td>Course #</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRI 220</td>
<td>3</td>
<td>Physics I</td>
<td>MRI 200</td>
</tr>
<tr>
<td>MRI 230</td>
<td>3</td>
<td>MRI Procedures and Pathophysiology I</td>
<td>MRI 260, MRI 220, MRI 221</td>
</tr>
<tr>
<td>MRI 201</td>
<td>3</td>
<td>Computer Applications in Medical Imaging</td>
<td>MRI 222, MRI 230, MRI 261</td>
</tr>
<tr>
<td>MRI 261</td>
<td>3</td>
<td>Clinical Practice I</td>
<td>MRI 260, MRI 220, MRI 221</td>
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</tbody>
</table>

Third Semester (Winter)

<table>
<thead>
<tr>
<th>Credit hours</th>
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<th>Course Title</th>
<th>Pre-requisites</th>
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<tbody>
<tr>
<td>Course #</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRI 222</td>
<td>3</td>
<td>MRI Physics II</td>
<td>MRI 260, MRI 220, MRI 221</td>
</tr>
<tr>
<td>MRI 232</td>
<td>3</td>
<td>MRI Procedures and Pathophysiology II</td>
<td>MRI 222, MRI 230, MRI 261</td>
</tr>
<tr>
<td>MRI 240</td>
<td>3</td>
<td>Image Analysis</td>
<td>MRI 232, MRI 201, MRI 262</td>
</tr>
<tr>
<td>MRI 262</td>
<td>3</td>
<td>Clinical Practice II</td>
<td>MRI 222, MRI 230, MRI 261</td>
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</table>

Fourth Semester (Spring)

<table>
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<th>Credit hours</th>
<th>Contact/Billing Hours</th>
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<td>Course #</td>
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<tr>
<td>MRI 263</td>
<td>3</td>
<td>Clinical Practice III</td>
<td>MRI 232, MRI 201, MRI 262</td>
</tr>
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<td>MRI 295</td>
<td>3</td>
<td>MRI Certification Exam Preparation</td>
<td>MRI 232, MRI 201, MRI 262</td>
</tr>
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</table>

* All MRI courses billed at Michigan College Online rates
NOTES:
* All MRI courses are offered through Michigan College Online.
* Acceptance into the MRI program is required prior to taking MRI courses.
* MRI courses from previous semesters serve as prerequisite courses.
* All courses in a semester must be passed with a minimum grade of “C” to progress to the next semester.
* BIO 138 (or BIO 135 or BIO 141 & BIO 142) must be passed with a minimum grade of “B-”.
* If students have taken science courses prior to admission into a specific program, the courses must have been completed within five (5) years of the date the student formally begins the program or the student must have worked in the field of Radiology during at least half of the interim.
* Prerequisites for this program may be repeated only once.

SUGGESTED SEQUENCE (After admission to the program)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>FIRST SEMESTER</td>
<td>SPE 101</td>
<td>3</td>
<td>Fundamentals of Communication OR</td>
</tr>
<tr>
<td></td>
<td>SPE 257</td>
<td>3</td>
<td>Public Speaking (Recommended this semester)</td>
</tr>
<tr>
<td></td>
<td>PSY 101</td>
<td>3</td>
<td>Introduction to General Psychology (Recommended this semester)</td>
</tr>
<tr>
<td></td>
<td>MRI 200</td>
<td>1</td>
<td>Professional Prospectus</td>
</tr>
<tr>
<td></td>
<td>MRI 260</td>
<td>3</td>
<td>MRI Pre-Clinical Preparation</td>
</tr>
<tr>
<td></td>
<td>MRI 241</td>
<td>3</td>
<td>Applied Sectional Anatomy</td>
</tr>
<tr>
<td>SECOND SEMESTER</td>
<td>SSC 200</td>
<td>3</td>
<td>The Social Sciences &amp; Contemporary America (Recommended this semester)</td>
</tr>
<tr>
<td></td>
<td>MRI 220</td>
<td>3</td>
<td>Physics I</td>
</tr>
<tr>
<td></td>
<td>MRI 230</td>
<td>3</td>
<td>MRI Procedures and Pathophysiology I</td>
</tr>
<tr>
<td></td>
<td>MRI 201</td>
<td>3</td>
<td>Computer Applications in Medical Imaging</td>
</tr>
<tr>
<td></td>
<td>MRI 261</td>
<td>3</td>
<td>Clinical Practice I</td>
</tr>
<tr>
<td>THIRD SEMESTER</td>
<td>HUM 200</td>
<td>3</td>
<td>Modernity &amp; Culture (Recommended this semester)</td>
</tr>
<tr>
<td></td>
<td>OR HUM 253</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MRI 222</td>
<td>3</td>
<td>MRI Physics II</td>
</tr>
<tr>
<td></td>
<td>MRI 232</td>
<td>3</td>
<td>MRI Procedures and Pathophysiology II</td>
</tr>
<tr>
<td></td>
<td>MRI 240</td>
<td>3</td>
<td>Image Analysis</td>
</tr>
<tr>
<td></td>
<td>MRI 262</td>
<td>3</td>
<td>Clinical Practice II</td>
</tr>
<tr>
<td>FOURTH SEMESTER</td>
<td>MRI 263</td>
<td>3</td>
<td>Clinical Practice III</td>
</tr>
<tr>
<td></td>
<td>MRI 295</td>
<td>3</td>
<td>MRI Certification Exam Preparation</td>
</tr>
</tbody>
</table>
ASSOCIATE IN APPLIED SCIENCE
MEDICAL ASSISTANT

THE MEDICAL ASSISTANT PROGRAM WILL BECOME A SELECTIVE ADMISSIONS PROGRAM EFFECTIVE FALL 2017.

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 65 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>BIO 131</td>
<td>3</td>
<td>Basic Anatomy &amp; Physiology</td>
<td>BIO 101 with a minimum grade of “C”</td>
</tr>
<tr>
<td>MAT 104</td>
<td>3</td>
<td>Basic Algebra</td>
<td>Minimum grade of “C” in MAT 101 or in MAT 102 equivalent</td>
</tr>
<tr>
<td>PSY 101</td>
<td>3</td>
<td>Intro to General Psychology</td>
<td></td>
</tr>
<tr>
<td>CIS 100</td>
<td>3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>ALH 100</td>
<td>2</td>
<td>Medical Terminology</td>
<td></td>
</tr>
<tr>
<td>BIS 127</td>
<td>4</td>
<td>Applied Office Accounting</td>
<td>MAT 104 for this degree</td>
</tr>
<tr>
<td>BIS 164</td>
<td>3</td>
<td>Business Communications</td>
<td>Recommended concurrent enrollment in BIS 140 OR knowledge of correct keyboarding techniques</td>
</tr>
</tbody>
</table>

Communication Skills (Group I)
Met with Prerequisites

Science and Mathematics (Group II) - 3 credit hours
- SCI 200 3 4 Science, Technology & Society 
  ENG 111 and either SPE 101 or SPE 257 (minimum grade of “C” in each)

Social Sciences (Group III) – 6 credit hours
- PSY 212 3 3 Developmental Psychology
  PSY 101
- 3 3 Group III Elective (Not PSY; SOC 101 Recommended)
  See reverse (or page two of printed version) for eligible subject areas.

Humanities and Fine Arts (Group IV) – 3 credit hours
- HUM 200 3 3 Modernity & Culture
  ENG 111 and either SPE 101 or 257 (minimum grade of “C” in each)
- OR HUM 253 3 3 American Culture
  ENG 111 and either SPE 101 or 257 (minimum grade of “C” in each)

Applied Arts and Sciences (Group V) - 26 credit hours
- ALH 112 3 3 Insurance Billing
- ALH 220 3 3 Medical Law and Ethics
- BIS 255 3 3 Procedures for the Medical Office
  CIS 100 OR BIS 140
- *ALH 212 3 4 Clinical Procedures I
  Admission to MA Program. Corequisite: ALH 213
- *ALH 213 3 4 Pharmacology for the Medical Assistant
  Admission to MA Program. Corequisite: ALH 212
- *ALH 214 3 4 Clinical Procedures II
  Admission to the Medical Assistant program and successful completion of ALH 212 and ALH 213 with a minimum grade of "C". Co-requisite ALH 230.
- *ALH 230 4 5 Laboratory Procedures for the Medical Office
  Admission to the Medical Assistant program and successful completion of ALH 212 and ALH 213 with a minimum grade of "C". Co-requisite ALH 214.
- *ALH 250 4 11 Medical Assistant Office Externship
  ALH 212, ALH 213, ALH 214 & ALH 230
NOTES:
* All courses marked with an asterisk (*) are Restricted Enrollment Classes. The student must get a signature from the Program Director or the Associate Dean of Health Sciences to be granted permission to the take these courses.
* Completion of BIO 131 must be taken within five years of being accepted into ALH 212.
* All courses leading to the completion of the Medical Assistant degree must be taken with a minimum grade of "C" and may be repeated only once, including withdrawals.
* A cumulative GPA of 2.5 (C+) is required to be eligible to be selected into the MA program classes (ALH 212, ALH 213, ALH 214, ALH 230, ALH 250).

REQUIRED SEQUENCE

FALL SEMESTER
ALH 212  Clinical Procedures I
ALH 213  Pharmacology for the Medical Assistant

WINTER SEMESTER
ALH 214  Clinical Procedures II
ALH 230  Laboratory Procedures for the Medical Office

SPRING SEMESTER
ALH 250  Medical Assistant Office Externship

Group III - Social Science
Anthropology, Economics, Geography, Human Environmental Studies, History (211, 212, 223, 251, 252), Political Science, Psychology, Social Science, Sociology
ASSOCIATE IN APPLIED SCIENCE

PHYSICAL THERAPIST ASSISTANT

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 75 credits is required to complete this program. See reverse (print) or page two (digital) for important program notes.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
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</thead>
<tbody>
<tr>
<td>PTA 101</td>
<td>1</td>
<td>Orientation to Physical Therapy</td>
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<tr>
<td>ALH 100</td>
<td>2</td>
<td>Medical Terminology</td>
<td></td>
</tr>
<tr>
<td>BIO 138</td>
<td>6</td>
<td>Human Anatomy and Physiology</td>
<td>BIO 101 (minimum grade of C)</td>
</tr>
<tr>
<td>OR BIO 141 AND</td>
<td>4</td>
<td>Anatomy &amp; Physiology I AND</td>
<td>BIO 101 (minimum grade of C) or equivalent</td>
</tr>
<tr>
<td>BIO 142</td>
<td>4</td>
<td>Anatomy &amp; Physiology II</td>
<td>BIO 141</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>Public Speaking</td>
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</table>

Other Program Requirements – 18 credit hours (The other program requirements must be passed with a cumulative GPA of “B-“ (2.7) or higher with a minimum grade of “C” in each course and may be taken before or while PTA courses are in progress.)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 100</td>
<td>3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>MAT 104</td>
<td>3</td>
<td>Basic Algebra</td>
<td>Minimum grade of “C&quot; in MAT 101 or equivalent</td>
</tr>
<tr>
<td>PHY 101</td>
<td>3</td>
<td>Introductory Physics</td>
<td></td>
</tr>
<tr>
<td>PSY 101</td>
<td>3</td>
<td>Intro to General Psychology</td>
<td></td>
</tr>
<tr>
<td>HUM 200</td>
<td>3</td>
<td>Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR HUM 253</td>
<td>3</td>
<td>American Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>SSC 200</td>
<td>3</td>
<td>The Social Sciences &amp; Contemp. America</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
</tbody>
</table>

First Semester – 8.5 credits (Admission to the program required before taking PTA courses)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
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</thead>
<tbody>
<tr>
<td>PTA 115</td>
<td>1.5</td>
<td>Clinical Kinesiology</td>
<td>Admission to Program; Corequisites: PTA 105, 106, 110, 111, 116</td>
</tr>
<tr>
<td>PTA 116</td>
<td>1</td>
<td>Clinical Kinesiology Lab</td>
<td>Admission to Program; Corequisites: PTA 105, 106, 110, 111, 115</td>
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<tr>
<td>PTA 105</td>
<td>1</td>
<td>Modalities I</td>
<td>Admission to Program; Corequisites: PTA 106, 110, 111, 115, 116</td>
</tr>
<tr>
<td>PTA 106</td>
<td>2</td>
<td>Modalities I Lab</td>
<td>Admission to Program; Corequisites: PTA 105, 110, 111, 115, 116</td>
</tr>
<tr>
<td>PTA 110</td>
<td>1</td>
<td>Therapeutic Exercise</td>
<td>Admission to Program; Corequisites: PTA 105, 106, 111, 115, 116</td>
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<tr>
<td>PTA 111</td>
<td>2</td>
<td>Therapeutic Exercise Lab</td>
<td>Admission to Program; Corequisites: PTA 105, 106, 110, 115, 116</td>
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</table>

Second Semester – 11 credits

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 125</td>
<td>1</td>
<td>Measurement Techniques</td>
<td>PTA 105, 106, 110, 111, 115, 116; Corequisites: PTA 126, 130, 131, 140</td>
</tr>
<tr>
<td>PTA 126</td>
<td>2</td>
<td>Measurement Techniques Lab</td>
<td>PTA 105, 106, 110, 111, 115, 116; Corequisites: PTA 125, 130, 131, 140</td>
</tr>
<tr>
<td>PTA 130</td>
<td>2</td>
<td>Advanced Therapeutic Exercise</td>
<td>PTA 105, 106, 110, 111, 115, 116; Corequisites: PTA 125, 126, 131, 140</td>
</tr>
<tr>
<td>PTA 131</td>
<td>2</td>
<td>Advanced Therapeutic Exercise Lab</td>
<td>PTA 105, 106, 110, 111, 115, 116; Corequisites: PTA 125, 126, 130, 140</td>
</tr>
<tr>
<td>PTA 140</td>
<td>4</td>
<td>Clinic I</td>
<td>PTA 105, 106, 110, 111, 115, 116; Corequisites: PTA 125, 126, 130, 131</td>
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Third Semester – 7.5 credits

<table>
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<th>Course Title</th>
<th>Pre-requisites</th>
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<tbody>
<tr>
<td>PTA 205</td>
<td>2</td>
<td>Modalities II</td>
<td>PTA 125, 126, 130, 131, 140; Corequisites: PTA 206, 207, 208</td>
</tr>
<tr>
<td>PTA 206</td>
<td>1.5</td>
<td>Modalities II Lab</td>
<td>PTA 125, 126, 130, 131, 140; Corequisites: PTA 205, 207, 208</td>
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<tr>
<td>PTA 207</td>
<td>2</td>
<td>Rehabilitation Techniques</td>
<td>PTA 125, 126, 130, 131, 140; Corequisites: PTA 205, 206, 208</td>
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<td>PTA 208</td>
<td>2</td>
<td>Rehabilitation Techniques Lab</td>
<td>PTA 125, 126, 130, 131, 140; Corequisites: PTA 205, 206, 207</td>
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</table>

Fourth Semester – 15 credits

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<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
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<tbody>
<tr>
<td>PTA 210</td>
<td>3</td>
<td>Clinical Forum</td>
<td>PTA 205, 206, 207, 208; Corequisite: PTA 240</td>
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<tr>
<td>PTA 240</td>
<td>12</td>
<td>Clinic II</td>
<td>PTA 205, 206, 207, 208; Corequisite: PTA 210</td>
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</table>
ASSOCIATE IN APPLIED SCIENCE
PHYSICAL THERAPIST ASSISTANT

Notes:
Prerequisite:
* The following courses must each be passed with a minimum grade of “B-“(2.7) and may be repeated only once:
  BIO 138 (or BIO 141 and BIO 142 each), ALH 100, ENG 111, SPE 101 or SPE 257 and PTA 101.
* BIO 138 or (BIO 141 and BIO 142) must be taken within 5 years of beginning the Physical Therapist Assistant (PTA) Program and may be repeated only once.
* Completion of BIO 135 (no longer offered) with a minimum grade of "B-") (2.7) within the last five years will satisfy the BIO 138/(141 &142) requirement.

Other Program Requirements:
* The other program requirements must be passed with a cumulative GPA of “B-“(2.7) or higher with a minimum grade of “C” in each course and may be taken before or while PTA courses are in progress.

PTA Courses:
* Admission to the PTA Program is required before taking all PTA Courses with the exception of PTA 101 which is a prerequisite course.
* Students must pass each PTA didactic (lecture and laboratory) course with a minimum grade of "B-" (2.7). Students must pass each PTA clinical education course (PTA 140 & 240). PTA 140 & 240 courses will be pass/fail; no grade will be given. Each course may be repeated only once.

Notes:
* Students must finish their Associate Degree in Applied Science requirements before receiving their Physical Therapist Assistant Certificate.
* The Physical Therapist Assistant Program at Mid Michigan Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) (1111 North Fairfax Street, Alexandria, VA 22314; phone (703) 706-3245; accreditation@apta.org; http://www.capteonline.org).
## ASSOCIATE IN APPLIED SCIENCE
### PLASTICS ENGINEERING TECHNOLOGY

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 65 credits is required to complete this program. "TR" denotes recommendations for students who intend to transfer after completion. Students should consult with a Transfer Advisor.

### Credit Hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>MAT 170</td>
<td>3</td>
<td>Technical Math II</td>
<td>Minimum grade of &quot;C&quot; in MAT 101 OR minimum grade of &quot;C&quot; in MAT 102 OR equivalent</td>
</tr>
<tr>
<td>OR MAT 124</td>
<td>5</td>
<td>Pre-Calculus (TR)</td>
<td>Minimum grade of &quot;C&quot; in MAT 105 OR equivalent</td>
</tr>
<tr>
<td>SCI 200</td>
<td>3</td>
<td>Science, Technology, &amp; Society</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR CHM 111</td>
<td>4</td>
<td>General College Chemistry (TR)</td>
<td>1 yr. HS Chemistry or CHM 105 or equivalent; 2 yrs. HS Algebra or MAT 105 (may be concurrent) or equivalent</td>
</tr>
<tr>
<td>PHY 103</td>
<td>4</td>
<td>Applied Physics</td>
<td>Corequisite: MAT 104 OR MAT 170</td>
</tr>
<tr>
<td>OR PHY 105</td>
<td>5</td>
<td>General Physics I (FSU)</td>
<td>MAT 124 OR equivalent</td>
</tr>
<tr>
<td>SSC 200</td>
<td>3</td>
<td>The Social Sciences &amp; Contemporary America</td>
<td>ENG 111 and either SPE 101 or SPE 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>HUM 200</td>
<td>3</td>
<td>Modernity &amp; Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
<tr>
<td>OR HUM 253</td>
<td>3</td>
<td>American Culture</td>
<td>ENG 111 and either SPE 101 or 257 (minimum grade of &quot;C&quot; in each)</td>
</tr>
</tbody>
</table>

### 8-11 hours (number depends on credits needed to reach degree minimum) must come from any combination of the following courses: ENG 222, Group III (ANT, ECO, PSY only), Group IV (from MTA list only - see page 2), or Group V (BIS, BUS, CIS, DRF, IND, WLD only)
Suggested Sequence of Courses

**YEAR 1 - SEMESTER 1: 16 CREDITS**

- **ENG 111**  Freshman English Composition  
  3
- **DRF 120**  Introduction to CAD  
  3
  or **DRF 210**  Solid Works  
  3
- **PLT 101**  Survey of the Plastics Industry  
  2
- **PLT 110**  Plastics and Polymer Materials  
  3
- **PLT 111**  Plastics and Polymer Material Testing Methods  
  3
- **PLT 130**  Thermoforming I  
  2

**YEAR 1 - SEMESTER 2: 16-18 CREDITS**

- **SPE 101**  Fundamentals of Communications  
  3
  or **SPE 257**  Public Speaking  
  3
- **MAT 170**  Technical Math II  
  3
  or **MAT 124**  Pre-calculus (Recommended for Ferris Transfer)  
  5
- Elective – Select from Approved List  
  3
- **PLT 120**  Plastics Manufacturing Processes I  
  4
- **PLT 135**  Thermoforming II  
  2
- **MID 150**  Career Readiness  
  1

**YEAR 1 - SUMMER: 2 CREDITS**

- **PLT 180**  Plastics Internship I  
  2

**YEAR 2 - SEMESTER 1: 15-16 CREDITS**

- **SCI 200**  Science, Technology & Society  
  3
- **PLT 225**  Production Planning and Control  
  3
- **PLT 235**  Manufacturing Quality Systems  
  3
- Electives – Select from Approved List (select Two Courses)  
  6-7

**YEAR 2 - SEMESTER 2: 16-18 CREDITS**

- **PHY 103**  Applied Physics  
  3
  or **PHY 105**  College Physics I  
  5
- **HUM 200**  Modernity and Culture  
  3
- **SSC 200**  Social Science & Contemporary America  
  3
- **PLT 250**  Plastics Product Development (3 Lecture, 2 Lab)  
  4
- Elective – Select from Approved List  
  3
ASSOCIATE IN APPLIED SCIENCE
RADIOGRAPHY

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC. A minimum of 74 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>course #</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prerequisites to the Program – 17 - 19 credit hours

- **ALH 100 2** Medical Terminology
- **CIS 100 3** Introduction to Information Systems
  - Touch keyboarding skills recommended
- **ENG 111 3** Freshman English Composition
  - Placement into ENG 111 or ENG 110 with a minimum grade of “C”
- **MAT 104 3** Basic Algebra
  - Minimum grade of “C” in MAT 101 or a minimum grade of “C” in MAT 102 OR equivalent
- **BIO 138 6** Human Anatomy and Physiology
  - BIO 101 (minimum grade of C)
  - OR BIO 141 AND BIO 101 (minimum grade of C) or equivalent

Other Required Courses – 12 credit hours

- **SPE 101** Fundamentals of Communication
- **PSY 101** Introduction to General Psychology
- **SSC 200** The Social Sciences & Contemporary America
  - ENG 111 and either SPE 101 or 257 (minimum grade of “C” in each)
- **HUM 200** Modernity & Culture
  - ENG 111 and either SPE 101 or 257 (minimum grade of “C” in each)
  - OR HUM 253 American Culture
  - ENG 111 and either SPE 101 or 257 (minimum grade of “C” in each)

Radiography Coursework - 45 credit hours

First Semester

- **RAD 100 3** Introduction to Radiologic Technology
  - Admission to the program; Corequisite: RAD 110, 113
- **RAD 110 2** Radiation Physics
  - Admission to the program; Corequisite: RAD 100, 113
- **RAD 113 1** Radiation Biology
  - Admission to the program; Corequisite: RAD 100, 110

Second Semester

- **RAD 115 3** Principles of Radiographic Exposure
  - RAD 100, RAD 110; Corequisite: RAD 130
- **RAD 130 4** Radiographic Procedures I
  - RAD 100, RAD 110; Corequisite: RAD 115

Third Semester

- **RAD 175 3** Radiographic Procedures II
  - RAD 115, RAD 130; Corequisite: RAD 180
- **RAD 180 6** Clinical Experience I
  - RAD 115, RAD 130; Corequisite: RAD 175

Fourth Semester

- **RAD 201 2** Clinical Issues in Radiography I
  - RAD 175, RAD 180; Corequisite: RAD 205, RAD 211, RAD 213,
  - RAD 205 7** Clinical Experience II
  - RAD 175, RAD 180; Corequisite: RAD 201, RAD 211, RAD 213,
- **RAD 211 1** Sectional Anatomy
  - RAD 175, RAD 180; Corequisite: RAD 201, RAD 205, RAD 213,
- **RAD 213 1** Radiation Protection
  - RAD 175, RAD 180; Corequisite: RAD 201, RAD 205, RAD 211,

Fifth Semester

- **RAD 217 2** Radiologic Techniques II
  - RAD 201, RAD 205, RAD 211, RAD 213; Corequisite: RAD 221, RAD 230, RAD 250
- **RAD 221 2** Clinical Issues in Radiography II
  - RAD 201, RAD 205, RAD 211, RAD 213; Corequisites: RAD 217, RAD 230, RAD 250
- **RAD 230 0.5** Radiographic Quality Assurance
  - RAD 201, RAD 205, RAD 211, RAD 213; Corequisites: RAD 217, RAD 221, RAD 230
- **RAD 250 7.5** Clinical Experience III
  - RAD 201, RAD 205, RAD 211, RAD 213; Corequisites: RAD 217, RAD 221, RAD 230

Important program notes and schedule of courses on reverse (print version) or page two (digital version).
NOTES:
* All courses in a semester must be passed with a minimum grade of “C” to progress to the next semester.
* BIO 138 (or BIO 141 & BIO 142 each) must be passed with a minimum grade of “B-“.
* If students have taken science courses prior to admission into a specific health program, the courses must have been completed within five (5) years of the date the student formally begins the program
* Prerequisites for this program may be repeated only once.

SUGGESTED SEQUENCE (after completion of pre-requisites)

**FIRST SEMESTER**
- RAD 100  Introduction to Radiologic Technology
- RAD 110  Radiation Physics
- RAD 113  Radiation Biology
- SPE 101  Fundamentals of Communication
- OR SPE 257 Public Speaking (Recommended this Semester)

**SECOND SEMESTER**
- PSY 101  Introduction of General Psychology (Recommended this Semester)
- RAD 115  Principles of Radiographic Exposure
- RAD 130  Radiographic Procedures I
- HUM 200  Modernity & Culture
- OR HUM 253  American Culture
- SSC 200  The Social Sciences & Contemporary America

**THIRD SEMESTER**
- RAD 175  Radiographic Procedures II
- RAD 180  Clinical Experience I

**FOURTH SEMESTER**
- RAD 201  Clinical Issues in Radiography I
- RAD 205  Clinical Experience II
- RAD 211  Sectional Anatomy
- RAD 213  Radiation Protection

**FIFTH SEMESTER**
- RAD 217  Radiologic Techniques II
- RAD 221  Clinical Issues in Radiography II
- RAD 230  Quality Assurance
- RAD 250  Clinical Experience III
ASSOCIATE DEGREE IN NURSING

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 65 credits is required to complete this program. Prerequisites to apply to the Nursing Program: Completion of Group I and Group II courses. See reverse (print) or page 2 (digital) for important program notes.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course #</td>
<td>Course Title</td>
</tr>
<tr>
<td>ENG 111 3</td>
<td>Freshman English Composition with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td>SPE 101 3</td>
<td>Fundamentals of Communication</td>
</tr>
<tr>
<td>OR SPE 257 3</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>BIO 138 6</td>
<td>Minimum grade of &quot;C&quot; in BIO 101</td>
</tr>
<tr>
<td>OR BIO 141 4</td>
<td>Minimum grade of &quot;C&quot; in BIO 101</td>
</tr>
<tr>
<td>AND BIO 142 4</td>
<td>Anatomy &amp; Physiology II</td>
</tr>
<tr>
<td>MAT 104 3</td>
<td>Minimum grade of &quot;C&quot; in MAT 101 or minimum grade of &quot;C&quot; in MAT 102 OR equivalent</td>
</tr>
<tr>
<td>SSC 200 3</td>
<td>The Social Sciences &amp; Contemporary America</td>
</tr>
<tr>
<td>HUM 200 3</td>
<td>Modernity &amp; Culture</td>
</tr>
<tr>
<td>ALH 100 2</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>CHM 106 4</td>
<td>Organic &amp; Biochemistry for Allied Health</td>
</tr>
<tr>
<td>BIO 210 4</td>
<td>Microbiology</td>
</tr>
<tr>
<td>NUR 101 8.5</td>
<td>Foundations in Nursing</td>
</tr>
<tr>
<td>NUR 150 3</td>
<td>Pharmacology in Nursing</td>
</tr>
<tr>
<td>NUR 151 0.5</td>
<td>Assessment in Nursing</td>
</tr>
<tr>
<td>NUR 102 7</td>
<td>Adult Health I</td>
</tr>
<tr>
<td>NUR 103 3</td>
<td>Mental Health Nursing</td>
</tr>
<tr>
<td>NUR 202 6</td>
<td>Adult Health II</td>
</tr>
<tr>
<td>NUR 203 5</td>
<td>Family Centered Nursing</td>
</tr>
<tr>
<td>NUR 204 6</td>
<td>Adult Health III</td>
</tr>
<tr>
<td>NUR 227 2</td>
<td>Leadership in Nursing</td>
</tr>
<tr>
<td>NUR 229 3</td>
<td>Capstone</td>
</tr>
</tbody>
</table>

ASSOCIATE DEGREE IN NURSING

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 65 credits is required to complete this program. Prerequisites to apply to the Nursing Program: Completion of Group I and Group II courses. See reverse (print) or page 2 (digital) for important program notes.
### ASSOCIATE DEGREE IN NURSING

NOTE: All NUR courses in a semester must be passed with a minimum grade of “78%” to progress to the next semester. For those intending to transfer, it is strongly recommended to take BIO.141 and BIO.142. Please speak with your advisor or Nursing Director. BIO.138, BIO.141 & BIO.142 courses must be passed with a minimum grade of “B-” to enter the program. BIO. 141 & BIO. 142 courses must also be taken at the same institution. If students have taken BIO. 138, BIO. 141 & BIO. 142 courses prior to admission to the Nursing Program, the courses must have been completed within five (5) years of the date the student formally begins the Nursing Program. Prerequisites may be repeated only once, which includes withdrawals.

NOTE: Admissions to the MMCC Nursing Program is based on a Selective Admission Process. Highly Recommended Courses will be awarded additional bonus points toward overall admission score. For further information contact the Nursing Department. Final acceptance into the nursing program is based on results of a criminal background check and urine drug screen.

NOTE: All NUR courses require a signature on the registration form from the Director of Nursing. Entry level students will receive this form at the orientation scheduled for incoming nursing students.

<table>
<thead>
<tr>
<th>FALL COHORT</th>
<th>WINTER COHORT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester: Total (12) Credits</strong></td>
<td><strong>Winter Semester: Total (12) Credits</strong></td>
</tr>
<tr>
<td>NUR 101: Foundations in Nursing</td>
<td>(8.5) Credits</td>
</tr>
<tr>
<td>NUR 150: Pharmacology in Nursing</td>
<td>(3) Credits</td>
</tr>
<tr>
<td>NUR 151: Assessment in Nursing</td>
<td>(0.5) Credits</td>
</tr>
<tr>
<td><strong>Winter Semester: Total (13) Credits</strong></td>
<td><strong>Fall Semester: (13) Credits</strong></td>
</tr>
<tr>
<td>NUR 102: Adult Health I</td>
<td>(7) Credits</td>
</tr>
<tr>
<td>NUR 103 Mental Health Nursing</td>
<td>(3) Credits</td>
</tr>
<tr>
<td>SSC 200: The Social Sciences &amp; Contemporary America (Recommended this Semester)</td>
<td>(3) Credits</td>
</tr>
<tr>
<td><strong>Fall Semester: Total (14) Credits</strong></td>
<td><strong>Winter Semester: Total (14) Credits</strong></td>
</tr>
<tr>
<td>NUR 202: Adult Health II</td>
<td>(6) Credits</td>
</tr>
<tr>
<td>NUR 203: Family Centered Nursing</td>
<td>(5) Credits</td>
</tr>
<tr>
<td>HUM 200: Modernity &amp; Culture (Recommended this Semester)</td>
<td>(3) Credits</td>
</tr>
<tr>
<td><strong>Winter Semester: Total (11) Credits</strong></td>
<td><strong>Fall Semester: Total (11) Credits</strong></td>
</tr>
<tr>
<td>NUR 204: Adult Health III</td>
<td>(6) Credits</td>
</tr>
<tr>
<td>NUR 227: Leadership in Nursing</td>
<td>(2) Credits</td>
</tr>
<tr>
<td>NUR 229: Capstone</td>
<td>(3) Credits</td>
</tr>
</tbody>
</table>

* NUR 229 is completed during the last 6 weeks of the semester

* NUR 229 is completed during the last 6 weeks of the semester
ASSOCIATE IN SCIENCE:
HEALTH SCIENCES TRANSFER

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program. A minimum of 15 credit hours must consist of 200 level coursework.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
</tr>
<tr>
<td>ENG 222</td>
<td>3</td>
<td>Expository Writing &amp; Research</td>
<td>Minimum grade of “C” in ENG 111</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 107*</td>
<td>3</td>
<td>College Algebra</td>
<td>Minimum grade of “C” in MAT 105 or equivalent</td>
</tr>
<tr>
<td>OR MAT 114</td>
<td>3</td>
<td>Mathematical Reasoning</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
</tr>
<tr>
<td>OR MAT 212</td>
<td>3</td>
<td>Introduction to Probability and Statistics</td>
<td>Minimum grade of “C” in MAT 104 or equivalent</td>
</tr>
</tbody>
</table>

*MAT 124, 126, 225, 226, and 230 also satisfy this requirement. Other MAT courses do not.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Two courses selected from the Designated MTA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Natural Science list</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group II Elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Two courses selected from the Designated MTA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Science list</td>
<td>NOTE: Courses cannot be from same discipline.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group III Elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Two courses selected from the Designated MTA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Humanities list</td>
<td>NOTE: Courses cannot be from same discipline.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group IV Elective</td>
<td></td>
</tr>
</tbody>
</table>

Electives - credits to reach minimum of 62

Select courses from Group II (except CIS), Group V (ALH, CIS 100, MRI, NUR, RAD, PHT, PTA), or Group VI (HED, PED).

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Elective</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Elective</td>
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<td></td>
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<td></td>
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<td>Elective</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Elective</td>
<td></td>
</tr>
</tbody>
</table>

Students are encouraged to meet with an Academic Advisor to select courses that are appropriate for academic and career goals. Distribution Group and Designated MTA course lists on reverse (print version) or page two (digital version)
ASSOCIATE IN SCIENCE: HEALTH SCIENCES TRANSFER

GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES

Students completing transfer degrees are required to complete the following:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Skills</td>
<td>Three courses -- ENG 111, ENG 222, and either SPE 101 or SPE 257</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>One of the following -- MAT 107, 114, 124, 126, 212, 225, 226, or 230</td>
</tr>
<tr>
<td>Natural Science</td>
<td>Two courses from the MTA list below, each from a different subject area.</td>
</tr>
<tr>
<td>Social Science</td>
<td>Two courses from the MTA list below, each from a different subject area.</td>
</tr>
<tr>
<td>Humanities</td>
<td>Two courses from the MTA list below, each from a different subject area.</td>
</tr>
</tbody>
</table>

MICHIGAN TRANSFER AGREEMENT

Many Michigan four-year colleges and universities are part of the Michigan Transfer Agreement. The Agreement requires completion of 30 credit hours of course work in general education areas. If a student has successfully completed the appropriate coursework, that student’s transcript will be marked “MTA Satisfied”. Participating four year colleges and universities will accept that as completion of 30 credits toward their general education requirements. (NOTE: Not all four year colleges and universities participate in MTA. Students intending to transfer should contact their intended transfer institution.) The MTA requires that colleges list coursework which is applicable. The following are MMCC’s Designated MTA courses (by MTA area):

<table>
<thead>
<tr>
<th>MTA Area</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>ENG 111</td>
</tr>
<tr>
<td>Communication</td>
<td>Either ENG 222, SPE 101, or SPE 257</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Either MAT 114, MAT 212, or one of the following: MAT 107, 124, 126, 212, 225, 226, 230</td>
</tr>
<tr>
<td>Natural Science</td>
<td>Two of the following, each from a different subject area: BIO 100, 101, 111, 112, 131, 135, 138, 141, 142, 201, 203, 210, 245; CHM 105, 106, 111, 112, 241, 242, 245, 246, 255, 256; GEL 101, 112; PHY 105, 211; PSC 101, 102; SCI 200. At least one must be a laboratory science.</td>
</tr>
<tr>
<td>Social Science</td>
<td>Two of the following, each from a different subject area: ANT 170; ECO 110, 201, 202; GEG 121; HIS 211, 212, 223; POL 201, 250; PSY 101, 103, 205, 212, 240, 285; SOC 101, 200, 202, 220, 250, 289; SSC 111, 200</td>
</tr>
<tr>
<td>Humanities</td>
<td>Two of the following, each from a different subject area: ENG 112, 201, 202, 205, 206, 213, 289; FRN 101, 102; GER 101, 102; HIS 101, 102; HUM 101, 102, 183, 200, 205, 210, 225, 253; MUS 275; PHL 201, 205, 210, 220, 250; REL 111, 200, 225, 250; SPN 101, 102, 201; TAI 275</td>
</tr>
</tbody>
</table>

If necessary, additional Designated MTA courses to total or exceed 30 credit hours.

DISTRIBUTION GROUPS

Group I - Communication Skills: ENG (104, 110,111, 222, 225), JOR, SPE

Group II - Science and Mathematics: BIO, CHM, CIS (110, 111, 121, 131, 151, 152, 175, 176), GEL, PSC, PHY, SCI; MAT

Group III - Social Science: ANT, ECO, GEG, HES, HIS (211, 212, 223, 251, 252), POL, PSY, SSC, SOC

Group IV - Humanities and Fine Arts: Humanities -- ENG (112, 201, 202, 205, 206, 211, 212, 213, 281), FRN, GER, HIS (101, 102), HUM, JPN, MUS (275), PHL, REL, SPN, TAI (275); Fine Arts -- ART, MUS (except 275), TAI (except 275)

Group V - Applied Arts & Sciences: ACC, AIM, ALH, AMS, BUS, CIS (except 110, 111, 121, 131, 151, 152, 175, 176), CST, CIS, DRF, ENT, HRA, IND, LEN, NUR, MRI, PHT, PLT, PTA, RAD, WLD

Group VI - Health/Physical Education: HED, PED

Group VII - Education: EDU

Group VIII - Personal Development: MID

65
ASSOCIATE IN SCIENCE
MATH AND SCIENCE STUDIES TRANSFER

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 15 of these credit hours must be taken at MMCC.

A minimum of 62 credits is required to complete this program. A minimum of 15 credits overall must be at the 200 level.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Pre-requisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course #</td>
<td>Course Title</td>
<td></td>
</tr>
</tbody>
</table>

### Communication Skills (Group I) - 9 credit hours
- ENG 111 3 3 Freshman English Composition
  Placement into ENG 111 or ENG 110 with a minimum grade of "C"
- ENG 222 3 3 Expository Writing & Research
  Minimum grade of "C" in ENG 111
- SPE 101 3 3 Fundamentals of Communication
- OR SPE 257 3 3 Public Speaking

### Science and Mathematics (Group II) – 24 credit hours
A minimum of 9 credits of Mathematics and Natural Science courses must be at the 200 level. (SCI 200 excluded)
- MAT 107* 3 3 College Algebra
  Minimum grade of "C" in MAT 105 or equivalent
- OR MAT 114 3 3 Mathematical Reasoning
  Minimum grade of "C" in MAT 104 or equivalent
- OR MAT 212 3 3 Introduction to Probability and Statistics
  Minimum grade of "C" in MAT 104 or equivalent

*MAT 124, 126, 225, 226, and 230 also satisfy this requirement. Other MAT courses do not.

- Two courses selected from the Designated MTA Natural Science list
  NOTE: Courses cannot be from same discipline.
- Selected from MAT, BIO, CHM, ENV, GEL, PHY, PSC or SCI
- Selected from MAT, BIO, CHM, ENV, GEL, PHY, PSC or SCI
- Selected from MAT, BIO, CHM, ENV, GEL, PHY, PSC or SCI
- Selected from MAT, BIO, CHM, ENV, GEL, PHY, PSC or SCI

### Social Sciences (Group III) - 6 credit hours
- 3 Two courses selected from the Designated MTA Social Science list
  NOTE: Courses cannot be from same discipline.

### Humanities (Group IV) - 6 credit hours
- 3 Two courses selected from the Designated MTA Humanities list
  NOTE: Courses cannot be from same discipline.

### Electives - credits to reach minimum of 62
Courses must be selected from Groups I, II, III, IV, VI and VIII. (Maximum of 6 credit hours from Group VI - HED or PED.) MID courses and courses numbered below the 100 level are NOT applicable.
- Elective
- Elective
- Elective
- Elective
- Elective
- Elective

Students should consult with an Academic Advisor to select courses appropriate for academic and career goals. Distribution Group and Designated MTA course lists on reverse (print version) or page two (digital version).
## ASSOCIATE IN SCIENCE

### MATH AND SCIENCE STUDIES TRANSFER

<table>
<thead>
<tr>
<th><strong>GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students completing transfer degrees are required to complete the following:</strong></td>
</tr>
<tr>
<td><strong>Communication Skills:</strong> Three courses -- ENG 111, ENG 222, and either SPE 101 or SPE 257</td>
</tr>
<tr>
<td><strong>Quantitative Reasoning:</strong> One of the following -- MAT 107, MAT 114, or MAT 212</td>
</tr>
<tr>
<td><strong>Natural Science:</strong> Two courses from the MTA list below, each from a different subject area.</td>
</tr>
<tr>
<td><strong>Social Science:</strong> Two courses from the MTA list below, each from a different subject area.</td>
</tr>
<tr>
<td><strong>Humanities:</strong> Two courses from the MTA list below, each from a different subject area.</td>
</tr>
</tbody>
</table>

### MICHIGAN TRANSFER AGREEMENT

Many Michigan four-year colleges and universities are part of the Michigan Transfer Agreement. The Agreement requires completion of 30 credit hours of course work in general education areas. If a student has successfully completed the appropriate coursework, that student's transcript will be marked "MTA Satisfied". Participating four year colleges and universities will accept that as completion of 30 credits toward their general education requirements. (NOTE: Not all four year colleges and universities participate in MTA. Students intending to transfer should contact their intended transfer institution.) The MTA requires that colleges list coursework which is applicable. The following are MMCC's Designated MTA courses (by MTA area):

<table>
<thead>
<tr>
<th><strong>Designated MTA courses -- each course must be completed with a minimum grade of C</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Composition</strong></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
</tr>
<tr>
<td><strong>Natural Science</strong></td>
</tr>
<tr>
<td><strong>Social Science</strong></td>
</tr>
<tr>
<td><strong>Humanities</strong></td>
</tr>
</tbody>
</table>

If necessary, additional Designated MTA courses to total or exceed 30 credit hours.

### DISTRIBUTION GROUPS

| **Group I - Communication Skills:** ENG (104, 110,111, 222, 225), JOR, SPE |
| **Group II - Science and Mathematics:** BIO, CHM, CIS (110, 111, 121, 131, 151, 152, 175, 176), GEL, PSC, PHY, SCI; MAT |
| **Group III - Social Science:** ANT, ECO, GEG, HIS (211, 212, 223, 251, 252), MID (103 only), POL, PSY, SSC, SOC |
| **Group IV - Humanities and Fine Arts:** Humanities -- ENG (112, 201, 202, 205, 206, 211, 212, 213, 281), FRN, GER, HIS (101, 102), HUM, JPN, MUS (275), PHL, REL, SPN, TAI (275); Fine Arts -- ART, MUS (except 275), TAI (except 275) |
| **Group V - Applied Arts & Sciences:** ACC, AIM, ALH, AMS, BUS, BIS, ECE, CIS (except 110, 111, 121, 131, 151, 152, 175, 176), CST, CIS, DRF, ENT, HRA, IND, LEN, NUR, MRI, PHT, PLT, PTA, RAD, WLD |
| **Group VI - Health/Physical Education:** HED, PED |
| **Group VII - Education:** EDU |
| **Group VIII - Personal Development:** MID (except 103) |
# CERTIFICATE OF ACHIEVEMENT
## ADVANCED INTEGRATED MANUFACTURING

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 33 credits is required to complete this program.

## Credit hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester (Fall) - 16 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 100</td>
<td>3 3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>DRF 210</td>
<td>3 3</td>
<td>Introduction to SolidWorks</td>
<td></td>
</tr>
<tr>
<td>MAT 170</td>
<td>3 3</td>
<td>Technical Math II</td>
<td>Minimum grade of &quot;C&quot; in MAT 101 OR minimum grade of &quot;C&quot; in MAT 102 OR equivalent</td>
</tr>
<tr>
<td>AIM 100</td>
<td>1 1</td>
<td>Industrial Safety (First 8 weeks)</td>
<td></td>
</tr>
<tr>
<td>AIM 105</td>
<td>2 2</td>
<td>Introduction to Advanced Integrated Manufacturing (First 8 weeks)</td>
<td></td>
</tr>
<tr>
<td>AIM 110</td>
<td>2 2</td>
<td>Manufacturing Production Processes (Second 8 weeks)</td>
<td>AIM 100</td>
</tr>
<tr>
<td>AIM 115</td>
<td>2 2</td>
<td>Manufacturing Materials (Second 8 weeks)</td>
<td>AIM 100</td>
</tr>
<tr>
<td><strong>Second Semester (Winter) - 17 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>3 3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3 3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>MAT 170</td>
<td>3 3</td>
<td>Technical Math II</td>
<td>Minimum grade of &quot;C&quot; in MAT 101 OR minimum grade of &quot;C&quot; in MAT 102 OR equivalent</td>
</tr>
<tr>
<td>AIM 120</td>
<td>2 2</td>
<td>Manufacturing Power and Equipment Systems (First 8 weeks)</td>
<td>AIM 100</td>
</tr>
<tr>
<td>AIM 125</td>
<td>2 2</td>
<td>Manufacturing Equipment Maintenance and Operations (First 8 weeks)</td>
<td>AIM 100</td>
</tr>
<tr>
<td>AIM 130</td>
<td>2 2</td>
<td>Design for Manufacturing (Second 8 weeks)</td>
<td>AIM 100</td>
</tr>
<tr>
<td>AIM 135</td>
<td>2 2</td>
<td>The Manufacturing Enterprise (Second 8 weeks)</td>
<td>AIM 100</td>
</tr>
<tr>
<td>□</td>
<td>3</td>
<td>Group V Elective</td>
<td></td>
</tr>
</tbody>
</table>
You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 35.5 credits is required to complete this program.

### FIRST SEMESTER (Fall) - 17.5 credit hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 104</td>
<td>2</td>
<td>Basic Automotive Electricity</td>
<td></td>
</tr>
<tr>
<td>AMS 110</td>
<td>4.5</td>
<td>Engine Fundamentals &amp; Overhaul</td>
<td></td>
</tr>
<tr>
<td>AMS 125</td>
<td>5</td>
<td>Engine Performance I</td>
<td></td>
</tr>
<tr>
<td>CIS 100</td>
<td>3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>WLD 126</td>
<td>3</td>
<td>Sense 1A</td>
<td></td>
</tr>
</tbody>
</table>

### SECOND SEMESTER (Winter) - 18 credit hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 116</td>
<td>3</td>
<td>Electrical Systems I: Electrical Accessories</td>
<td>AMS 104 (may be taken concurrently) or Instructor approval</td>
</tr>
<tr>
<td>AMS 124</td>
<td>4</td>
<td>Automotive Heating &amp; Air Conditioning</td>
<td></td>
</tr>
<tr>
<td>AMS 126</td>
<td>5</td>
<td>Engine Performance II</td>
<td>AMS 104 and AMS 125, OR State certified in tuneup area</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”.</td>
</tr>
<tr>
<td>MAT 101</td>
<td>3</td>
<td>Basic Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

For Gainful Employment information see reverse (print version) or page two (electronic version)
CERTIFICATE OF ACHIEVEMENT:
AUTOMOTIVE SERVICE MECHANIC (1 YEAR)

Gainful Employment Information

ADDITIONAL LINKS AND INFORMATION
Occupation: Automotive Service Technicians and Mechanics
SOC code: 49-3023.00
Occupational Profile URL: http://www.onetonline.org/link/summary/49-3023.00

To visit links referenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ged-2015-16
CERTIFICATE OF ACHIEVEMENT:
AUTOMOTIVE TECHNOLOGY (2 YEAR)

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 63 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course #</strong></td>
</tr>
<tr>
<td>ENG 111</td>
</tr>
<tr>
<td>SPE 101</td>
</tr>
<tr>
<td>OR SPE 257</td>
</tr>
<tr>
<td>MAT 101</td>
</tr>
<tr>
<td>CIS 100</td>
</tr>
<tr>
<td>AMS 104</td>
</tr>
<tr>
<td>AMS 110</td>
</tr>
<tr>
<td>AMS 116</td>
</tr>
<tr>
<td>AMS 124</td>
</tr>
<tr>
<td>AMS 125</td>
</tr>
<tr>
<td>AMS 126</td>
</tr>
<tr>
<td>AMS 205</td>
</tr>
<tr>
<td>AMS 206</td>
</tr>
<tr>
<td>AMS 214</td>
</tr>
<tr>
<td>AMS 222</td>
</tr>
<tr>
<td>AMS 223</td>
</tr>
<tr>
<td>AMS 232</td>
</tr>
<tr>
<td>MID 150</td>
</tr>
<tr>
<td>WLD 126</td>
</tr>
</tbody>
</table>

Note: AMS coursework must be completed with a minimum grade of “C” to be eligible for AMS 232 Internship.

A suggested sequence of courses is presented on reverse (printed version) or page two (digital version).
CERTIFICATE OF ACHIEVEMENT:
AUTOMOTIVE TECHNOLOGY (2 YEAR)

RECOMMENDED COURSE SEQUENCE
FIRST SEMESTER
AMS 104
AMS 110
AMS 125

SECOND SEMESTER
AMS 116
AMS 124
AMS 126
MID 150

THIRD SEMESTER
AMS 205
AMS 206
AMS 223

FOURTH SEMESTER
AMS 214
AMS 222
AMS 232

AMS 104  AMS 116
AMS 104  AMS 126
AMS 110  AMS 124  AMS 205  AMS 206  AMS 214  AMS 222  AMS 223

AMS 232 (AMS 214 & 222 can be concurrent)
CERTIFICATE OF ACHIEVEMENT:
AUTOMOTIVE TECHNOLOGY (2 YEAR)

Gainful Employment Information

**COST**

Q. How much will this program cost me?*

A. Tuition and fees: $10,941  
   Books and supplies: $2,122  
   On-campus room & board: not offered

What other costs are there for this program?  
For further program cost information: [click here]

* The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

**SUCCESS**

Q. How long will it take me to complete this program?

A. The program is designed to take 60 weeks to complete. Of those that completed the program in 2014-2015, *% finished in 60 weeks.

* Fewer than 10 students completed this program in 2014-15. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

Q. What are my chances of getting a job when I graduate?

A. The job placement rate for students who completed this program is *%.

* This institution is not currently required to calculate a job placement rate for program completers.

**FINANCING**

Q. What financing options are available to help me pay for this program?

A. Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

   - Federal loans: *  
   - Private education loans: *  
   - Institutional financing plan: *

* There were fewer than 10 graduates in this program. Median amounts are withheld to preserve the confidentiality of graduates.

For additional information related to this program and/or the information provided above: [click here]

Date Created: 1/27/2016

**ADDITIONAL LINKS AND INFORMATION**

Occupation: Automotive Service Technicians and Mechanics  
SOC code: 49-3023.00  
Occupational Profile URL: [http://www.onetonline.org/link/summary/49-3023.00](http://www.onetonline.org/link/summary/49-3023.00)

To visit links referenced in the graphic, go to:  
CERTIFICATE OF ACHIEVEMENT

BUSINESS INFORMATION SYSTEMS

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 31 credits is required to complete this program.

For Gainful Employment information see reverse (print version) or page two (electronic version)

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST SEMESTER (Fall) - 15 credit hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ BIS 120</td>
<td>3 3</td>
<td>Office Mathematics</td>
<td></td>
</tr>
<tr>
<td>☐ CIS 100</td>
<td>3 3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recomended</td>
</tr>
<tr>
<td>☐ BIS 140</td>
<td>3 3</td>
<td>Beginning Word Processing/Keyboarding</td>
<td></td>
</tr>
<tr>
<td>☐ BIS 164</td>
<td>3 3</td>
<td>Business Communications I</td>
<td>Recommend concurrent enrollment in BIS 140 OR CIS 100 OR knowledge of correct keyboarding techniques.</td>
</tr>
<tr>
<td>☐ BIS 250</td>
<td>3 3</td>
<td>Records Management</td>
<td>CIS 100, BIS 140 or equivalent</td>
</tr>
<tr>
<td>SECOND SEMESTER (Winter) - 16 credit hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ BIS 127</td>
<td>4 4</td>
<td>Applied Office Accounting</td>
<td>BIS 120 for Business Information Systems students only</td>
</tr>
<tr>
<td>☐ BUS 151</td>
<td>3 3</td>
<td>Introduction to Business Issues</td>
<td></td>
</tr>
<tr>
<td>☐ BIS 142</td>
<td>3 3</td>
<td>Intermediate Word Processing/Keyboarding</td>
<td>BIS 140 or equivalent</td>
</tr>
<tr>
<td>☐ ENG 111</td>
<td>3 3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111, or ENG 110 with a minimum grade of “C”</td>
</tr>
<tr>
<td>☐ SPE 101</td>
<td>3 3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3 3</td>
<td>Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>
GAINFUL EMPLOYMENT INFORMATION

ADDITIONAL LINKS AND INFORMATION

Occupation: Executive Secretaries and Executive Administrative Assistants
SOC code: 43-6011.00
Occupational Profile URL: http://www.onetonline.org/link/summary/43-6011.00

To visit links referenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ged-2015-16
# CERTIFICATE OF ACHIEVEMENT:
## COMPUTER ASSISTED DRAFTING (CAD)

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 38 credits is required to complete this program.

For Gainful Employment information see reverse (print version) or page two (electronic version)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Credit Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER - 16 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ DRF 101</td>
<td>3 3</td>
<td>Technical Drawing</td>
<td></td>
</tr>
<tr>
<td>☐ DRF 120</td>
<td>3 3</td>
<td>Introduction to AutoCAD</td>
<td></td>
</tr>
<tr>
<td>☐ DRF 210</td>
<td>3 3</td>
<td>Introduction to SolidWorks</td>
<td></td>
</tr>
<tr>
<td>☐ IND 101</td>
<td>4 4</td>
<td>Basic Machine Shop Practices</td>
<td></td>
</tr>
<tr>
<td>☐ CIS 100</td>
<td>3 3</td>
<td>Introduction to Computer Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER - 16 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ DRF 201</td>
<td>3 3</td>
<td>Mechanical Detail Drafting w/CAD</td>
<td>DRF 101 and DRF 120</td>
</tr>
<tr>
<td>☐ DRF 211</td>
<td>3 3</td>
<td>Advanced SolidWorks Applications</td>
<td></td>
</tr>
<tr>
<td>☐ IND 113</td>
<td>4 4</td>
<td>CNC Machining</td>
<td></td>
</tr>
<tr>
<td>☐ ENG 111</td>
<td>3 3</td>
<td>Freshman English Composition</td>
<td>ENG 110 with a minimum grade of C; or placement into ENG 111</td>
</tr>
<tr>
<td>☐ MAT 170</td>
<td>3 3</td>
<td>Technical Math II</td>
<td>MAT 101 or equivalent</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER - 6 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ DRF 280</td>
<td>3 3</td>
<td>CAD Program and Software Certification</td>
<td>Minimum grade of “B” in DRF 101, 105, 201, 210, and 211 OR successful completion of competency exam with minimum score of 83%</td>
</tr>
<tr>
<td>☐ SPE 101</td>
<td>3 3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3 3</td>
<td>Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>
CERTIFICATE OF ACHIEVEMENT:
COMPUTER ASSISTED DRAFTING (CAD)

Gainful Employment Information

ADDITIONAL LINKS AND INFORMATION
Occupation: CAD Designer
SOC code: 17-3013.00
Occupational Profile URL: http://www.onetonline.org/link/summary/17-3013.00

To visit links referenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ged-2015-16
**CERTIFICATE OF ACHIEVEMENT:**

**EARLY CHILDHOOD EDUCATION**

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 31 credits is required to complete this program.

For Gainful Employment information see reverse (print version) or page two (electronic version)

**Prerequisites to the Program:**

**Required:**
- Health Requirements Met
  - Validation of no Evidence of Child Abuse or Neglect per Public Act 68 of 1993
  - Successful ICHAT and National Sex Offender Registry background searches
- Recommended: First Aid and CPR Certification

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course #</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER (Fall) - 14 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td></td>
<td>ECE 101</td>
<td>4</td>
<td>Introduction to Early Childhood Education</td>
</tr>
<tr>
<td>☐</td>
<td></td>
<td>ECE 112</td>
<td>4</td>
<td>Infancy</td>
</tr>
<tr>
<td>☐</td>
<td></td>
<td>CIS 100</td>
<td>3</td>
<td>Introduction to Information Systems</td>
</tr>
<tr>
<td>☐</td>
<td></td>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
</tr>
</tbody>
</table>

| **SECOND SEMESTER (Winter) - 17 credit hours** | | | | |
| ☐ | | ECE 113 | 4 | Early Childhood | Pre-requisite: ECE 101 and ECE 112, or permission of the ECE Coordinator |
| ☐ | | ECE 114 | 4 | Interacting with Children, Parent/Adult Child Relations | Pre-requisite: ECE 101 and ECE 112 |
| ☐ | | MAT 101 | 3 | Basic Mathematics | |
| ☐ | | PSY 101 | 3 | Introduction to General Psychology | |
| ☐ | | SPE 101 | 3 | Fundamentals of Communication | |
| ☐ | | OR SPE 257 | 3 | Public Speaking | |

Please Note: If going for an Associate’s degree, all courses must be completed with a minimum grade of “C”.

For Gainful Employment information see reverse (print version) or page two (electronic version)
Gainful Employment Information

Additional Links and Information

Occupation: Child Care Worker
SOC Code: 39-9011.00
Occupational Profile URL: [http://www.onetonline.org/link/summary/39-9011.00](http://www.onetonline.org/link/summary/39-9011.00)

To visit links referenced in the graphic, go to:
CERTIFICATE OF ACHIEVEMENT:
MACHINE TOOL OPERATION

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 12 of these credit hours must be taken at MMCC.

A minimum of 33 credits is required to complete this program.

### FIRST SEMESTER (Fall) - 17 credit hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 101</td>
<td>4</td>
<td>4</td>
<td>Basic Machine Shop Practices</td>
<td></td>
</tr>
<tr>
<td>IND 113</td>
<td>4</td>
<td>4</td>
<td>CNC Machining</td>
<td></td>
</tr>
<tr>
<td>DRF 120</td>
<td>3</td>
<td>3</td>
<td>Introduction to AutoCAD</td>
<td>MAT 101 or equivalent</td>
</tr>
<tr>
<td>MAT 170</td>
<td>3</td>
<td>3</td>
<td>Technical Mathematics II</td>
<td>MAT 101 or equivalent</td>
</tr>
<tr>
<td>WLD 126</td>
<td>3</td>
<td>4</td>
<td>Sense 1A</td>
<td></td>
</tr>
</tbody>
</table>

### SECOND SEMESTER (Winter) - 16 credit hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 102</td>
<td>4</td>
<td>4</td>
<td>Machine Tool Practices II</td>
<td>IND 101 and a minimum grade of “C” in MAT 104 or equivalent</td>
</tr>
<tr>
<td>IND 116</td>
<td>4</td>
<td>4</td>
<td>CNC Programming</td>
<td>IND 101, IND 113, minimum grade of “C” in MAT 105 or MAT 170 or equivalent</td>
</tr>
<tr>
<td>IND 140</td>
<td>3</td>
<td>3</td>
<td>Metallurgy and Industrial Materials</td>
<td></td>
</tr>
<tr>
<td>DRF 105</td>
<td>2</td>
<td>2</td>
<td>Intro to Geometric Dimensioning &amp; Tolerancing</td>
<td>DRF 101; IND 101 Recommended</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with grade a minimum grade of “C”</td>
</tr>
</tbody>
</table>

For Gainful Employment information see reverse (print version) or page two (electronic version)
CERTIFICATE OF ACHIEVEMENT:
MACHINE TOOL OPERATION

ADDITIONAL LINKS AND INFORMATION
Occupation: Computer-Controlled Machine Tool Operator
SOC code: 51-4011.00
Occupational Profile URL: . http://www.onetonline.org/link/summary/51-4011.00

To visit links refenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ped-2015-16
CERTIFICATE OF ACHIEVEMENT:
PHARMACY TECHNICIAN SPECIALIST

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 41 credits is required to complete this program.

The Pharmacy Technician Program is a one-year Certificate of Achievement program emphasizing community and institutional pharmacy practice where technicians work under the supervision of a registered pharmacist. Role play, communication, teamwork, and conflict management are emphasized. The comprehensive training program has laboratory course instruction which emphasizes hand-on skill development. The program includes 320 hours of an institutional and community pharmacy practicum. The coursework prepares the individual for the national certification PHT courses must be taken in sequence

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALH 100</td>
<td>2</td>
<td>Medical Terminology</td>
<td>Minimum grade of &quot;C&quot; in MAT 104 or equivalent</td>
</tr>
<tr>
<td>MAT 104</td>
<td>3</td>
<td>Intermediate Algebra</td>
<td></td>
</tr>
<tr>
<td>BIO 120</td>
<td>3</td>
<td>Introduction to Human Disease</td>
<td>ALH 100 recommended</td>
</tr>
<tr>
<td>CIS 100</td>
<td>3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 104</td>
<td>4 5</td>
<td>Orientation to Pharmacy &amp; Community Pharmacy Practice</td>
<td>Corequisites: PHT 105, PHT 106</td>
</tr>
<tr>
<td>PHT 105</td>
<td>2</td>
<td>Pharmacy Law</td>
<td>Corequisites: PHT 104, PHT 106</td>
</tr>
<tr>
<td>PHT 106</td>
<td>3</td>
<td>Pharmaceutical Calculations</td>
<td>Corequisites: PHT 104, PHT 105</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 113</td>
<td>4 5</td>
<td>Orientation to Institutional Pharmacy Practice</td>
<td>PHT 104, PHT 105, PHT 106. Corequisite: PHT 114</td>
</tr>
<tr>
<td>PHT 114</td>
<td>4 4.5</td>
<td>Pharmacology for Pharmacy Technicians</td>
<td>PHT 104, PHT 105, PHT 106, BIO 120. Corequisite: PHT 113</td>
</tr>
<tr>
<td>PHT 115</td>
<td>7 15</td>
<td>Pharmacy Technician Clinical</td>
<td>PHT 113, PHT 114, SPE 101 OR SPE 257</td>
</tr>
</tbody>
</table>

NOTES:
* All courses in a semester must be passed with a minimum grade of “C” to progress to the next semester.
* Students must maintain a minimum GPA of 2.0.
* PHT courses may be repeated only once.
* Limited Enrollment Program. Student must be admitted to PHT program prior to registering for PHT classes.
Gainful Employment Information

PROGRAM COSTS

How much will this program cost me?

Tuition and Fees (in-district rates)
$3,181.00
Books and Supplies
$752.90
On-campus room and board
not offered

PROGRAM FINANCING

What are my financing options to pay for the program?

*Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:*

Federal Loans
*Less than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

Private Educational Loans
*Less than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

Institutional Financing Loans
*Less than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

PROGRAM SUCCESS

How long will it take me to complete this program?

*The program is designed to take 45 weeks to complete.*

*Of those that completed the program in 2012-2013, 0% finished in 45 weeks.*

What are the chances of getting a job when I graduate?

*This institution is not currently required to calculate a job placement rate for program completers.*

ADDITIONAL LINKS AND INFORMATION

Occupation: Pharmacy Technician
A minimum of 31 credits is required to complete this program.

### Communication Skills (Group I) - 6 credit hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
<td>Fundamentals of Communication</td>
<td></td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>

### Science and Mathematics (Group II) – 3 credit hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 170</td>
<td>3</td>
<td>Technical Math II</td>
<td>Minimum grade of “C” in MAT 101 OR minimum grade of “C” in MAT 102 OR equivalent</td>
</tr>
</tbody>
</table>

### Applied Arts and Sciences (Group V) - 32 credit hours

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRF 120</td>
<td>3</td>
<td>Introduction to AutoCAD</td>
<td></td>
</tr>
<tr>
<td>OR DRF 210</td>
<td>3</td>
<td>Introduction to SolidWorks</td>
<td></td>
</tr>
<tr>
<td>PLT 101</td>
<td>2</td>
<td>Survey of the Plastics Industry</td>
<td></td>
</tr>
<tr>
<td>PLT 110</td>
<td>3</td>
<td>Plastics and Polymer Materials</td>
<td></td>
</tr>
<tr>
<td>PLT 111</td>
<td>3</td>
<td>Plastics and Polymer Material Testing</td>
<td>Co-Requisite: PLT 110</td>
</tr>
<tr>
<td>PLT 120</td>
<td>4</td>
<td>Plastics Manufacturing Processes I</td>
<td>Co-Requisite: PLT 101</td>
</tr>
<tr>
<td>PLT 130</td>
<td>2</td>
<td>Thermoforming I</td>
<td>PLT 130 or Permission of Instructor</td>
</tr>
<tr>
<td>PLT 135</td>
<td>2</td>
<td>Thermoforming II</td>
<td></td>
</tr>
</tbody>
</table>

3 hours must come from any combination of the following courses:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIS 127</td>
<td>4</td>
<td>Applied Office Accounting</td>
<td>BIS 120</td>
</tr>
<tr>
<td>BUS 122</td>
<td>3</td>
<td>Management Theory &amp; Practice</td>
<td></td>
</tr>
<tr>
<td>BUS 151</td>
<td>3</td>
<td>Introduction to Business Issues</td>
<td></td>
</tr>
<tr>
<td>BUS 171</td>
<td>3</td>
<td>Principles of Sales</td>
<td></td>
</tr>
<tr>
<td>BUS 222</td>
<td>3</td>
<td>Labor and Management Relations</td>
<td>BUS 122</td>
</tr>
<tr>
<td>BUS 241</td>
<td>3</td>
<td>Supervision and Personnel Administration</td>
<td></td>
</tr>
<tr>
<td>BUS 250</td>
<td>3</td>
<td>Entrepreneurial Management</td>
<td></td>
</tr>
<tr>
<td>CIS 100</td>
<td>3</td>
<td>Introduction to Information Systems</td>
<td>Touch keyboarding skills recommended</td>
</tr>
<tr>
<td>DRF 201</td>
<td>3</td>
<td>Mechanical Detail Drawing w/CAD</td>
<td>DRF 101 and DRF 120</td>
</tr>
<tr>
<td>ECO 201</td>
<td>3</td>
<td>Principles of Economics - Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECO 202</td>
<td>3</td>
<td>Principles of Economics - Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ENT 221</td>
<td>3</td>
<td>Marketing Strategies for Entrepreneurs</td>
<td></td>
</tr>
<tr>
<td>IND 101</td>
<td>4</td>
<td>Basic Machine Shop Practices</td>
<td></td>
</tr>
<tr>
<td>IND 113</td>
<td>4</td>
<td>CNC Machining</td>
<td></td>
</tr>
<tr>
<td>IND 140</td>
<td>3</td>
<td>Metallurgy and Industrial Materials</td>
<td></td>
</tr>
<tr>
<td>PSY 103</td>
<td>3</td>
<td>Human Relations</td>
<td></td>
</tr>
<tr>
<td>WLD 126</td>
<td>3</td>
<td>Sense 1A</td>
<td></td>
</tr>
</tbody>
</table>

A suggested sequence of courses is presented on reverse (printed version) or page two (digital version).
Suggested Sequence of Courses

**YEAR 1 - SEMESTER 1: 16 CREDITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>Freshman English Composition</td>
<td>3</td>
</tr>
<tr>
<td>DRF 120</td>
<td>Introduction to CAD</td>
<td>3</td>
</tr>
<tr>
<td>or DRF 210</td>
<td>Solid Works</td>
<td>[3]</td>
</tr>
<tr>
<td>PLT 101</td>
<td>Survey of the Plastics Industry</td>
<td>2</td>
</tr>
<tr>
<td>PLT 110</td>
<td>Plastics and Polymer Materials</td>
<td>3</td>
</tr>
<tr>
<td>PLT 111</td>
<td>Plastics and Polymer Material Testing Methods</td>
<td>3</td>
</tr>
<tr>
<td>PLT 130</td>
<td>Thermoforming I</td>
<td>2</td>
</tr>
</tbody>
</table>

**YEAR 1 - SEMESTER 2: 15 CREDITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE 101</td>
<td>Fundamentals of Communications</td>
<td>3</td>
</tr>
<tr>
<td>or SPE 257</td>
<td>Public Speaking</td>
<td>[3]</td>
</tr>
<tr>
<td>MAT 170</td>
<td>Technical Math II</td>
<td>3</td>
</tr>
<tr>
<td>Elective – Select from Approved List</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PLT 120</td>
<td>Plastics Manufacturing Processes I</td>
<td>4</td>
</tr>
<tr>
<td>PLT 135</td>
<td>Thermoforming II</td>
<td>2</td>
</tr>
</tbody>
</table>
ADDITIONAL LINKS AND INFORMATION
Occupation: Computer-Controlled Machine Tool Operator
SOC code: 51-4011.00
Occupational Profile URL: http://www.onetonline.org/link/summary/51-4011.00

To visit links referenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ged-2015-16
# CERTIFICATE OF ACHIEVEMENT: WELDING TECHNOLOGY

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 35 credits is required to complete this program.

For Gainful Employment information see reverse (print version) or page two (electronic version)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER (Fall) - 12 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WLD 126</td>
<td>3 4</td>
<td>SENSE Ia</td>
<td></td>
</tr>
<tr>
<td>DRF 101</td>
<td>3 3</td>
<td>Technical Drawing</td>
<td></td>
</tr>
<tr>
<td>IND 140</td>
<td>3 3</td>
<td>Metallurgy &amp; Industrial Materials</td>
<td></td>
</tr>
<tr>
<td>MAT 170</td>
<td>3 3</td>
<td>Technical Mathematics II</td>
<td>MAT 101 OR equivalent</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER (Winter) - 12 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WLD 127</td>
<td>3 4</td>
<td>SENSE Ib</td>
<td>WLD 126</td>
</tr>
<tr>
<td>WLD 130</td>
<td>3 4</td>
<td>Metal Fabrication</td>
<td>WLD 125 OR WLD 126, DRF 101</td>
</tr>
<tr>
<td>DRF 120</td>
<td>3 3</td>
<td>Introduction to AutoCAD</td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>3 3</td>
<td>Freshman English Composition</td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of “C”</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER (Fall) - 11 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WLD 225</td>
<td>8 12</td>
<td>Advanced Welding</td>
<td>WLD 125 OR WLD 127</td>
</tr>
<tr>
<td>WLD 245</td>
<td>3 4</td>
<td>Pipe Welding OR</td>
<td>WLD 125 OR WLD 127</td>
</tr>
<tr>
<td>OR IND 101</td>
<td>4 6</td>
<td>Basic Machine Shop Practices</td>
<td></td>
</tr>
</tbody>
</table>
Gainful Employment Information

ADDITIONAL LINKS AND INFORMATION
Occupation: Welders, Cutters, Solderers, and Brazers
SOC code: 51-4121.00
Occupational Profile URL:  [http://www.onetonline.org/link/summary/51-4121.00](http://www.onetonline.org/link/summary/51-4121.00)

To visit links referenced in the graphic, go to:
### MICHIGAN TRANSFER AGREEMENT (MTA)

A minimum of 30 credits is required to complete the MTA. At least 1 course must be taken at Mid Michigan Community College. Coursework transferred from other institutions that does not have a direct MMCC equivalent may be eligible to satisfy MTA, dependent on evaluation.

#### Designated MTA courses: EACH course must be completed with a minimum grade of "C".

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Composition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>3</td>
<td>Freshman English Composition</td>
</tr>
<tr>
<td>ENG 110</td>
<td></td>
<td></td>
<td>Placement into ENG 111 or ENG 110 with a minimum grade of &quot;C&quot;</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 222</td>
<td>3</td>
<td>3</td>
<td>Expository Writing &amp; Research</td>
</tr>
<tr>
<td>OR SPE 101</td>
<td>3</td>
<td>3</td>
<td>Fundamentals of Communication</td>
</tr>
<tr>
<td>OR SPE 257</td>
<td>3</td>
<td>3</td>
<td>Public Speaking</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 107</td>
<td>3</td>
<td>3</td>
<td>College Algebra</td>
</tr>
<tr>
<td>OR MAT 114</td>
<td>3</td>
<td>3</td>
<td>Mathematical Reasoning</td>
</tr>
<tr>
<td>OR MAT 212</td>
<td>3</td>
<td>3</td>
<td>Introduction to Probability and Statistics</td>
</tr>
<tr>
<td><strong>Natural Science</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social Science</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Humanities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Additional Coursework</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Additional Coursework

If necessary, additional Designated MTA courses (from above lists) to total or exceed 30 credit hours.
Many Michigan four-year colleges and universities are part of the Michigan Transfer Agreement. The Agreement requires completion of 30 credit hours of coursework in general education areas. If a student has successfully completed the appropriate coursework, that student's transcript will be marked "MTA Satisfied". Participating four year colleges and universities will accept that as completion of 30 credits toward their general education requirements. Students intending to transfer should contact their intended transfer institution. The MTA requires that colleges list coursework which is applicable.
# TRAINING CREDENTIAL
## ADVANCED INTEGRATED MANUFACTURING

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 18 credits is required to complete this program.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester (Fall) - 10 credit hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ MAT 170</td>
<td>3 3</td>
<td>Technical Math II</td>
<td>Minimum grade of &quot;C&quot; in MAT 101 OR minimum grade of &quot;C&quot; in MAT 102 OR equivalent</td>
</tr>
<tr>
<td>□ AIM 100</td>
<td>1 1</td>
<td>Industrial Safety (First 8 weeks)</td>
<td></td>
</tr>
<tr>
<td>□ AIM 105</td>
<td>2 2</td>
<td>Introduction to Advanced Integrated Manufacturing (First 8 weeks)</td>
<td>AIM 100</td>
</tr>
<tr>
<td>□ AIM 110</td>
<td>2 2</td>
<td>Manufacturing Production Processes (Second 8 weeks)</td>
<td>AIM 100</td>
</tr>
<tr>
<td>□ AIM 115</td>
<td>2 2</td>
<td>Manufacturing Materials (Second 8 weeks)</td>
<td>AIM 100</td>
</tr>
</tbody>
</table>

| Second Semester (Winter) - 8 credit hours | | | |
| □ MAT 170 | 3 3 | Technical Math II | Minimum grade of "C" in MAT 101 OR minimum grade of "C" in MAT 102 OR equivalent |
| □ AIM 120 | 2 2 | Manufacturing Power and Equipment Systems (First 8 weeks) | AIM 100 |
| □ AIM 125 | 2 2 | Manufacturing Equipment Maintenance and Operations (First 8 weeks) | AIM 100 |
| □ AIM 130 | 2 2 | Design for Manufacturing (Second 8 weeks) | AIM 100 |
| □ AIM 135 | 2 2 | The Manufacturing Enterprise (Second 8 weeks) | AIM 100 |
TRAINING CREDENTIAL:
COMPUTED TOMOGRAPHY TECHNOLOGY

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 16 credits is required to complete this program.

Students must have graduated from an accredited program and be a registered radiographer RT(R).

In Collaboration with Michigan College Online

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course #</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester (Fall) - 8 credit hours</td>
<td></td>
<td>CTG 210</td>
<td>1</td>
<td>* CT Patient Care and Safety (8 weeks)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTG 215</td>
<td>1</td>
<td>* Principles of CT (8 weeks)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTG 230</td>
<td>3</td>
<td>* CT Procedures and Pathophysiology I (15 weeks)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTG 240</td>
<td>3</td>
<td>* CT Clinical Practice I (15 weeks; 3 8-hour Shifts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Semester (Winter) - 8 credit hours</td>
<td></td>
<td>CTG 220</td>
<td>2</td>
<td>* CT Instrumentation (12 weeks)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTG 231</td>
<td>3</td>
<td>* CT Procedures and Pathophysiology II (15 weeks)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTG 241</td>
<td>3</td>
<td>* CT Clinical Practice II (15 weeks; 3 8-hour Shifts)</td>
</tr>
</tbody>
</table>

* All MRI courses billed at Michigan College Online rates

NOTES:
* All CTG courses are offered through Michigan College Online.
* Acceptance into the CTG program is required prior to taking CTG courses
* CTG courses from previous semesters serve as prerequisite courses.
* All courses in a semester must be passed with a minimum grade of “C” to progress to the next semester.
ADVANCED CREDENTIAL:
GEOTHERMAL TECHNOLOGY

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 19 credits is required to complete this program.

COURSES ARE DELIVERED IN A COMPRESSED SEQUENTIAL FORMAT
Note: This course of study is not intended for students without collegiate or professional experience. Please see pre-requisite "a" below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ HRA 251</td>
<td>3</td>
<td>3</td>
<td>Geothermal Basics</td>
<td>HRA 240 OR MMCC HRA Heating Specialist Certificate and MMCC Refrigeration Specialist Certificate OR Associate in Applied Science: Heating Refrigeration Air Conditioning from an accredited college or university OR Lead faculty approved significant, verifiable field experience in the heating, refrigeration and air conditioning industry.</td>
</tr>
<tr>
<td>□ HRA 254</td>
<td>3</td>
<td>4</td>
<td>Air Source Heat Pumps</td>
<td>HRA 251</td>
</tr>
<tr>
<td>□ HRA 261</td>
<td>3</td>
<td>3</td>
<td>Geothermal System Design</td>
<td>HRA 251</td>
</tr>
<tr>
<td>□ HRA 262</td>
<td>3</td>
<td>3</td>
<td>Geothermal Loop Systems</td>
<td>HRA 251</td>
</tr>
<tr>
<td>□ HRA 263</td>
<td>3</td>
<td>3</td>
<td>Closed Loop Ground Source Heat Pump Installation Workshop IGSHPA</td>
<td>HRA 251</td>
</tr>
<tr>
<td>□ HRA 265</td>
<td>4</td>
<td>6</td>
<td>Geothermal Research and Development</td>
<td>HRA 251</td>
</tr>
</tbody>
</table>
ADVANCED CREDENTIAL:
GEOTHERMAL TECHNOLOGY

GAINFUL EMPLOYMENT INFORMATION

Occupation: Heating and Air Conditioning Mechanics and Installers
SOC code: 49-9021.01
Occupational Profile URL: .
http://www.onetonline.org/link/summary/49-9021.02

To visit links referenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ged-2015-16
**TRAINING CREDENTIAL:**

**HEATING/ELECTRICITY SPECIALIST**

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 26 credits is required to complete this program

For Gainful Employment information see reverse (print version) or page two (electronic version)

Note: FAST TRACK COURSES ARE DELIVERED IN A COMpressed SEQUENTIAL FORMAT

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Course #</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HRA 116</td>
<td>3  4 Fundamentals of Electricity</td>
</tr>
<tr>
<td></td>
<td>HRA 205</td>
<td>2  3 Motors &amp; Controls</td>
</tr>
<tr>
<td></td>
<td>HRA 106</td>
<td>3  4 Heating Fundamentals</td>
</tr>
<tr>
<td></td>
<td>HRA 108</td>
<td>3  4 Heating Systems</td>
</tr>
<tr>
<td></td>
<td>HRA 223</td>
<td>3  3 Residential HVAC Load Determination</td>
</tr>
<tr>
<td></td>
<td>MID 150</td>
<td>1  1 Career Readiness</td>
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**SECOND SEMESTER (Winter) - 8 credit hours**

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Course #</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>HRA 225</td>
<td>3  3 Residential HVAC Distribution/Design</td>
</tr>
<tr>
<td></td>
<td>HRA 105</td>
<td>3  4 Hydronics</td>
</tr>
<tr>
<td></td>
<td>HRA 285</td>
<td>2  2 Co-op (Heating, Refrigeration &amp; Air Conditioning)</td>
</tr>
</tbody>
</table>

**THIRD SEMESTER (SPRING) - 3 credit hours**

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Course #</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HRA 215</td>
<td>3  4 HRA Controls</td>
</tr>
</tbody>
</table>

**HRA Course Sequencing Schedule (Courses listed complete both HRA Training Credentials.)**

**Fast Track – Fall Start**

- **Fall Semester**
  - HRA 116 (3) credits
  - HRA 205 (2) credits
  - HRA 106 (3) credits
  - HRA 108 (3) credits
  - HRA 223 (3) credits
  - MID 150 (1) credit
  - Total (15) credits

- **Winter Semester**
  - HRA 225 (3) credits
  - HRA 105 (3) credits
  - HRA 102 (3) credits
  - HRA 104 (3) credits
  - HRA 285 (2) credits
  - HRA 204 (3) credits
  - Total (18) credits

- **Spring Semester**
  - HRA 198 (1) credits
  - HRA 220 (2) credits
  - HRA 215 (3) credits
  - HRA 240 (3) credits
  - Total (9) credits

For Gainful Employment information see reverse (print version) or page two (electronic version)
TRAINING CREDENTIAL:
HEATING/ELECTRICITY SPECIALIST

Gainful Employment Information

ADDITIONAL LINKS AND INFORMATION
Occupation: Heating and Air Conditioning Mechanics and Installers
SOC code: 49-9021.01
Occupational Profile URL: http://www.onetonline.org/link/summary/49-9021.01

To visit links referenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ged-2015-16
TRAINING CREDENTIAL:
REFRIGERATION/AIR CONDITIONING SPECIALIST

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 26 credits is required to complete this program.

For Gainful Employment information see reverse (print version) or page two (electronic version)

Note: FAST TRACK COURSES ARE DELIVERED IN A COMPRESSED SEQUENTIAL FORMAT

<table>
<thead>
<tr>
<th>Course #</th>
<th>Credit Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRA 116</td>
<td>3</td>
<td>Fundamentals of Electricity</td>
<td></td>
</tr>
<tr>
<td>HRA 205</td>
<td>2</td>
<td>Motors &amp; Controls</td>
<td>HRA 116</td>
</tr>
<tr>
<td>MID 150</td>
<td>1</td>
<td>Career Readiness</td>
<td>Permission of Instructor</td>
</tr>
</tbody>
</table>

FIRST SEMESTER (Fall) - 6 credit hours

SECOND SEMESTER (Winter) - 11 credit hours

THIRD SEMESTER (Spring) - 9 credit hours

HRA Course Sequencing Schedule (Courses listed complete both HRA Training Credentials.)

Fast Track – Fall Start (Day Classes)

Fall Semester
- HRA 116 (3) credits
- HRA 205 (2) credits
- HRA 106 (3) credits
- HRA 108 (3) credits
- HRA 223 (3) credits
- MID 150 (1) credit
- Total (15) credits

Winter Semester
- HRA 225 (3) credits
- HRA 105 (3) credits
- HRA 102 (3) credits
- HRA 104 (3) credits
- HRA 285 (2) credits
- HRA 204 (3) credits
- Total (18) credits

Spring Semester
- HRA 198 (1) credits
- HRA 220 (2) credits
- HRA 215 (3) credits
- HRA 240 (3) credits
- Total (9) credits
GAINFULLY EMPLOYMENT INFORMATION

TRAINING CREDENTIAL:
REFRIGERATION/AIR CONDITIONING SPECIALIST

ADDITIONAL LINKS AND INFORMATION
Occupation: Refrigeration Mechanics and Installers
SOC code: 49-9021.02
Occupational Profile URL: [http://www.onetonline.org/link/summary/49-9021.02](http://www.onetonline.org/link/summary/49-9021.02)

To visit links referenced in the graphic, go to:
You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 27 credits is required to complete this program.

For Gainful Employment information see reverse (print version) or page two (electronic version).

Prerequisites to Program: CIS 100 (3) Introduction to Information Processing Systems and BIS 140 (3) Beginning Word Processing/Keyboarding OR equivalent.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Contact/Billing Hours</th>
<th>Pre-requisites</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester - 12 credit hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ BIS 120 3 3 Office Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ BIS 142 3 3 Intermediate Keyboarding</td>
<td>BIS 140 OR equivalent</td>
<td></td>
</tr>
<tr>
<td>☐ BIS 138 3 3 Basic Legal Terminology</td>
<td>BIS 140 OR equivalent OR concurrent enrollment, BIS 164 recommended OR concurrent enrollment.</td>
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<tr>
<td>☐ BIS 164 3 3 Business Communication I</td>
<td>Recommend concurrent enrollment in BIS 140 OR CIS 100 OR knowledge of correct keyboarding techniques.</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester - 15 credit hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ BUS 153 3 3 Business Law</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ BIS 250 3 3 Records Management</td>
<td>CIS 100, BIS 140 OR equivalent</td>
<td></td>
</tr>
<tr>
<td>☐ BIS 254 3 3 Office Procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ BIS 200 3 3 Advanced Word Processing Applications</td>
<td>BIS 140 OR equivalent, CIS 100 recommended.</td>
<td></td>
</tr>
<tr>
<td>☐ BIS 264 3 3 Business Communication II</td>
<td>BIS 164 OR ENG 111</td>
<td></td>
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</tbody>
</table>
### ADDITIONAL LINKS AND INFORMATION

**Occupation:** Legal Secretary  
**SOC code:** 43-6012.00  
**Occupational Profile URL:** [http://www.onetonline.org/link/summary/43-6012.00](http://www.onetonline.org/link/summary/43-6012.00)

To visit links referenced in the graphic, go to:  
You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 26 credits is required to complete this program.

For Gainful Employment information see reverse (print version) or page two (electronic version)

Prerequisites to Program: CIS 100 (3) Introduction to Information Systems and BIS 140 (3) Beginning Word Processing/Keyboarding OR equivalent.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
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<tbody>
<tr>
<td><strong>First Semester (Suggested Sequence) - 11 credit hours</strong></td>
<td></td>
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<tr>
<td>□ ALH 100</td>
<td>2</td>
<td>Medical Terminology</td>
<td></td>
</tr>
<tr>
<td>□ BIS 120</td>
<td>3</td>
<td>Office Mathematics</td>
<td></td>
</tr>
<tr>
<td>□ BIS 142</td>
<td>3</td>
<td>Intermediate Keyboarding</td>
<td>BIS 140 OR equivalent</td>
</tr>
<tr>
<td>□ BIS 164</td>
<td>3</td>
<td>Business Communication I</td>
<td>Recommend concurrent enrollment in BIS 140 OR CIS 100 OR knowledge of correct keyboarding techniques.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Contact/Billing Hours</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second Semester (Suggested Sequence) - 15 credit hours</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>□ ALH 112</td>
<td>3</td>
<td>Insurance Billing</td>
<td>Prerequisite: ALH 100</td>
</tr>
<tr>
<td>□ BIS 250</td>
<td>3</td>
<td>Records Management</td>
<td>CIS 100, BIS 140 OR equivalent</td>
</tr>
<tr>
<td>□ BIS 255</td>
<td>3</td>
<td>Medical Office Procedures</td>
<td>CIS 100, BIS 140</td>
</tr>
<tr>
<td>□ BIS 264</td>
<td>3</td>
<td>Business Communication II</td>
<td>BIS 164 OR ENG 111</td>
</tr>
<tr>
<td>□ CIS 130</td>
<td>3</td>
<td>Applications with Microcomputers</td>
<td>CIS 100 with a minimum grade of “C”</td>
</tr>
</tbody>
</table>

For Gainful Employment information see reverse (print version) or page two (electronic version)
TRAINING CREDENTIAL:
MEDICAL OFFICE SPECIALIST

GAINFUL EMPLOYMENT INFORMATION

Additional Links and Information
Occupation: Office Clerks and General Secretaries
SOC code: 43-9061.00
Occupational Profile URL http://www.onetonline.org/link/summary/43-9061.00

To visit links referenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ged-2015-16
TRAINING CREDENTIAL:
RECORDS INFORMATION MANAGEMENT SPECIALIST

You, as a student, are responsible for meeting requirements for your curriculum. Your advisor is available for consultation. At least 6 of these credit hours must be taken at MMCC.

A minimum of 27 credits is required to complete this program.

For Gainful Employment information see reverse (print version) or page two (electronic version)

Prerequisites to Program: CIS 100 (3) Introduction to Information Systems and BIS 140 (3) Beginning Word Processing/Keyboarding OR equivalent.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIS 120</td>
<td>3 Office Mathematics</td>
<td>BIS 140 OR equivalent</td>
</tr>
<tr>
<td>BIS 142</td>
<td>3 Intermediate Keyboarding</td>
<td>Recommend concurrent enrollment in BIS 140 OR CIS 100 OR knowledge of correct keyboarding techniques.</td>
</tr>
<tr>
<td>BIS 164</td>
<td>3 Business Communication I</td>
<td>BIS 164, ENG 111 may be taken concurrently</td>
</tr>
<tr>
<td>BIS 136</td>
<td>3 Terminology and Proofreading</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIS 250</td>
<td>3 Records Management</td>
<td>CIS 100, BIS 140 OR equivalent</td>
</tr>
<tr>
<td>BIS 254</td>
<td>3 Office Procedures</td>
<td></td>
</tr>
<tr>
<td>BIS 200</td>
<td>3 Advanced Word Processing Applications</td>
<td>BIS 140 OR equivalent, CIS 100 recommended.</td>
</tr>
<tr>
<td>BIS 264</td>
<td>3 Business Communication II</td>
<td>BIS 164 OR ENG 111</td>
</tr>
<tr>
<td>CIS 221</td>
<td>3 Computers in Business</td>
<td>Prerequisite or Corequisite: ACC 201</td>
</tr>
</tbody>
</table>

For Gainful Employment information see reverse (print version) or page two (electronic version)
Record Information Management Specialist

Gainful Employment Information

Occupation: Office Clerk
SOC code: 43-9061.00
Occupational Profile URL: http://www.onetonline.org/link/summary/43-9061.00

To visit links referenced in the graphic, go to:
https://www.midmich.edu/academics/programs-of-study/all-degrees-credentials/ged-2015-16
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(AIM) ADVANCED INTEGRATED MANUFACTURING ................................................................. 108
(ALH) ALLIED HEALTH ............................................................................................................. 109
(AMS) AUTOMOTIVE SERVICE ................................................................................................. 110
(ANT) ANTHROPOLOGY ............................................................................................................ 111
(ART) ART ..................................................................................................................................... 111
(BIO) BIOLOGICAL SCIENCES ................................................................................................. 113
(BIS) BUSINESS INFORMATION SYSTEMS .............................................................................. 115
(BUS) BUSINESS ....................................................................................................................... 117
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(CIS) COMPUTER INFORMATION SYSTEMS .............................................................................. 119
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(DRF) DRAFTING ....................................................................................................................... 123
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The College year is composed of two semesters, one fall and one winter, there is also one spring session, and the units of academic study are recorded in credit hours. Class dates and times are published on MidWeb.

EXAMPLE

ENG 201 English Literature I 3(3-0)
A survey of works of major authors of English literature from Beowulf through the 18th century.
Prerequisite: ENG 112 or permission of the instructor.

COURSE LISTING DEFINITIONS ARE AS FOLLOWS:

Course Number and Title: Designates the course discipline, number and title. Courses numbered 000-099 are designated to serve purposes at other than normal freshman or sophomore levels. Such courses normally will not transfer or satisfy graduation requirements. Courses numbered 100-199 are primarily introductory in scope and are normally, although not necessarily, taken during the freshman year. Courses numbered 200 and above are designed for the more advanced student and are usually elected during the sophomore year.

Credit Hours: The number of credits a course is assigned toward graduation.

Lecture-Laboratory Hours: The first number in parentheses refers to the hours the student will spend per week in the classroom, in a lecture setting. The second number refers to the instructional hours that a student will spend in a laboratory. The addition of these two figures will produce the total number of contact hours the student will spend per week in class.

Course Description: An explanation of the knowledge and skills gained by successful completion of the course.

Prerequisite: Requirements which must be met or courses which must be taken before enrolling in a specific course.

Corequisite: Courses which must be taken at the same time as the desired course unless previously completed.

(ACC) ACCOUNTING

ACC 201 Financial Accounting 4(4-0)
This course is an introduction to the accounting process including measurement, reporting, and interpretation of principles for assets, liabilities, owners’ equity, revenues, and expenses. Covers service and merchandising types of businesses.

ACC 205 Payroll Accounting 3(4-0)
This course is designed as a study of the methods of computing wages and salaries, keeping payroll records, and making government reports. Students will practice completing government forms and filing of periodic reports. This course also introduces students to the processing of payroll through the use of the microcomputer. In addition to the classroom work, each student is required to do a minimum of one hour of individual laboratory work per week.
Prerequisite: ACC 201 recommended

ACC 211 Managerial Accounting 4(4-0)
The emphasis in this course is on uses of accounting data internally by managers in directing the affairs of organizations. An introduction to financial statement analysis and manufacturing accounting included in addition to classroom work.
Prerequisites: Grade of C or better in ACC 201

ACC 231 Principles of Cost Accounting 3(3-0)
This course covers the use of cost accounting as an aid to management decision making. Process, job order, and standard cost systems are covered in detail.
Prerequisite: ACC 211

ACC 251 Tax Accounting I 3(3-0)
This course is designed for persons new or inexperienced in the preparation of federal and Michigan income tax returns. The emphasis is preparation of form 1040 and supporting schedules. Included is an introduction to computerized tax planning and preparation.
Prerequisite: ACC 201 recommended

ACC 252 Tax Accounting II 3(3-0)
The emphasis in this course is placed on current tax law provisions. Topics include corporations, partnerships, and estates and trusts, as well as more complex individual tax returns.
Prerequisite: ACC 251

ACC 261 Computerized Accounting 3(3-0)
An introduction to the use of computers in accounting, this course covers computerized business accounting systems including computerized payroll systems. In addition, there will be utilization of spreadsheets.
Prerequisites: CIS 130, ACC 211
ACC 275 Intermediate Accounting I 3(3-0)
ACC 275 is the first of two intermediate accounting courses that describe accounting theory and principles for defining, measuring, and reporting financial information, with an emphasis on Assets. The course will provide an opportunity to understand the challenges and limitations of accounting standards in order to critically evaluate and understand financial accounting. It will require the use of spreadsheets for problem solving and analysis.
Prerequisite: ACC 211 with a minimum grade of C

ACC 276 Intermediate Accounting II 3(3-0)
ACC 276 is the second of two intermediate accounting courses that describe accounting theory and principles for defining, measuring, and reporting financial information, with an emphasis on Liabilities and Equity. Additionally, accounting for investments, leases, debt and earnings per share will be considered. Provides an opportunity to understand the challenges and limitations of accounting standards in order to critically evaluate and understand financial accounting. It will require the use of spreadsheets for problem solving and analysis.
Prerequisite: ACC 275 with a minimum grade of C

ACC 280 Accounting Internship 2(2-0)
Internship is a capstone course planned for the last semester of the Associate in Applied Science: Accounting Degree. The students will be employed in an approved internship position selected by the college coordinator and faculty. A waiver may be allowed for the work component only with equivalent previous/present work experience as determined by the coordinator. Documentation by the employer will be required.
Prerequisite: The student must have completed at least 45 credit hours in the Associate in Applied Science: Accounting Degree and completion of MID 150.

ACC 290 - 299 Selected Topics 3(3-0)
These courses are designed to investigate various topics in Accounting not included in current courses. Topics will be announced.

AIM 105 Introduction to Advanced Integrated Manufacturing 2(2-0)
This course is designed to introduce the student to the world of advanced manufacturing and establish a foundation upon which further studies in manufacturing might rest. Students will explore basic manufacturing materials and processes, tools, techniques, and produce some simple products. This course is designed for a flipped classroom environment. Utilizing online delivery of course content with one campus meetings for discussion, project/lab demonstration and hands on activities. This course will be part of a program that uses ADS (Alternative Delivery System).
Prerequisite: None

AIM 110 Manufacturing Production Processes 2(2-0)
This course is designed to provide the student with a hands-on learning experience with the basic tools, equipment, and operations of manufacturing industries. The student will also understand the relationship between a manufacturing need, a design, materials, processes, as well as tools and equipment. During this course, the student will utilize many of the basic manufacturing processes to produce primary and secondary materials for manufacturing. This course is designed for a flipped classroom environment. Utilizing online delivery of course content with one campus meetings for discussion, project/lab demonstration and hands on activities. This course will be part of a program that uses ADS (Alternative Delivery System).
Prerequisite: AIM 100 Industrial Safety

AIM 115 Manufacturing Materials 2(2-0)
This course will introduce students to manufacturing materials, materials testing, and material science. Additionally, this course will introduce students to primary and secondary processing in manufacturing and allow the student to construct and conduct experiments with various manufacturing materials. This course is designed for a flipped classroom environment. Utilizing online delivery of course content with one campus meetings for discussion, project/lab demonstration and hands on activities. This course will be part of a program that uses ADS (Alternative Delivery System).
Prerequisite: AIM 100 Industrial Safety (ALH) Allied Health

AIM 120 Manufacturing Power & Equipment Systems 2(2-0)
This course is designed to expand upon previous courses and allow students the opportunity to demonstrate knowledge of power systems and use the advanced tools of manufacturing production. Students will plan, design, implement, use, and troubleshoot manufacturing power systems, equipment systems, and control systems. This course is designed for a flipped classroom environment. Utilizing online delivery of course content with one campus meetings for discussion, project/lab demonstration and hands on activities. This course...
will be part of a program that uses ADS (Alternative Delivery System).

Prerequisite: AIM 100 Industrial Safety

**AIM 125 Manufacturing Equipment Maintenance & Operations 2(2-0)**

This course is designed to provide the student with a basic knowledge of manufacturing equipment, safety, maintenance and operation procedures, control systems as well as leadership abilities in the field. This course is designed for a flipped classroom environment. Utilizing online delivery of course content with one campus meetings for discussion, project/lab demonstration and hands on activities. This course will be part of a program that uses ADS (Alternative Delivery System).

Prerequisite: AIM 100 Industrial Safety

**AIM 130 Design for Manufacturing 2(2-0)**

This course is designed to expand on the introductory AIM courses and expose the student to basic design concepts, blueprint reading & schematics and drawing skills used in product and process design within the field of manufacturing. Additionally, the course is designed to expose students to a number of interpersonal skills and competencies necessary for a sustained career in manufacturing. This course is designed for a flipped classroom environment. Utilizing online delivery of course content with one campus meetings for discussion, project/lab demonstration and hands on activities. This course will be part of a program that uses ADS (Alternative Delivery System).

Prerequisite: AIM 100

**AIM 135 The Manufacturing Enterprise 2(2-0)**

This course is designed to expand upon concepts learned in AIM courses while allowing students to further explore how manufacturing enterprises are established, how they maintain control, how they plan, how they produce, package, and distributed. Emphasis in this course will be placed on Lean Manufacturing, Quality Systems (QS, ISO, TS, etc.), Kaizen, 5S’s, Quick Response Manufacturing, Inventory Control Systems. This course is designed for a flipped classroom environment. Utilizing online delivery of course content with one campus meetings for discussion, project/lab demonstration and hands on activities. This course will be part of a program that uses ADS (Alternative Delivery System).

Prerequisite: AIM 100

**ALH 100 Medical Terminology 2(2-0)**

This course is an introduction to medical terminology. Emphasis is placed on the meaning, pronunciation, spelling, and application of common medical terms, abbreviations, prefixes, stems, suffixes, etc., as related to the human body tissues, organs, systems, etc.

**ALH 112 Insurance Billing 3(3-0)**

This course deals with the insurance and billing processes needed to deal with the major health carriers. Students will learn how to process a variety of claim forms and will learn proper billing, record keeping, and collection procedures.

Prerequisite: ALH 100

**ALH 125 Introduction to the Health Care Environment 3(3-0)**

This course is designed to introduce the allied health student to health care today, health care systems, functions and trends, ethical and legal responsibilities in health care, workplace safety, handling hazardous materials, reporting hazardous activities, emergency preparedness, ergonomics, infection control, controlling health care costs, historical background, interpersonal-relationships, future roles, and successful employment strategies. The student will be introduced to health care professional organizations. The course provides the student with the foundation upon which other courses build and expand.

Prerequisites: ALH 100

**ALH 212 Clinical Procedures I 3(2-2)**

This class is an introduction to common procedures performed in the medical office setting for the Medical Assistant. A course designed with emphasis on safe, accurate administration of medications. Through use of the text, the students will acquire knowledge of drug actions, major side effects, and techniques of administration as well as gain basic skills necessary to assist the physician in the examination of, diagnosis and treatment of patients in the office setting.

Prerequisite: AIM 100

**ALH 213 Pharmacology for Medical Assistants 3(2-2)**

Competency-based objectives to guide Medical Assistant students in their study of each unit in the Pharmacology text. This class stresses the rights of drug administration, including drug administration procedures that include standard precautions, purpose, equipment/supplies, and procedure steps to administering medications. Emphasis is placed on the legal implications of drug therapy, safety, and accuracy in calculating and administering medications.

Prerequisite: Admission to the Medical Assistant Program

Corequisite: ALH 213

**ALH 214 Clinical Procedures II 3(2-2)**

Introduction to clinical duties of the Medical Assistant student related to medical specialties. Review of anatomy and physiology of the human body. Disorders of the human body, diagnostic and therapeutic procedures are emphasized and critical thinking is utilized in caring for patients in the medical office.

Prerequisites: ALH 212, ALH 213 with a minimum grade of C.

Corequisite: ALH 230
**ALH 220 Medical Law and Ethics 3(3-0)**

This course is designed to teach the legal and ethical aspects of employment in health care delivery. Case studies will be reviewed and students will become familiar with the principles of medical ethics as they apply to both physicians and medical assistants. A few of the topics to be covered are: patient obligation in a medical contract, patient confidentiality, standards of care, physicians’ liability for employees, release of information, and patient rights and responsibility in receiving medical care.

**ALH 230 Laboratory Procedures for the Medical Office 4(3-2)**

This course is designed primarily for the allied health field, and medical assistant students in particular. The student should have a basic understanding of both biological principles and anatomy and physiology. The student will, through lecture and lab, gain an understanding of the theory of laboratory procedures as well as the skills to perform accurately in the Physician's Office Laboratory (POL) setting.

Prerequisite: ALH 212, ALH 213
Corequisite: ALH 214

**ALH 250 Medical Assisting Office Externship 4(5.25-0)**

This externship course provides supervised and professional work experience in a medical office setting and will include both administrative and clinical procedures. Written projects and reports will enable the student to develop management skills, professional communications and critical thinking skills.

Prerequisite: ALH 212, ALH 213, ALH 214, ALH 230.

**ALH 290 - 299 Current Topics in Allied Health 3(3-0)**

These courses are designed to investigate various topics in health not included in current courses. Topics will be announced.

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**AMS 104 Basic Automotive Electricity 2(2-1)**

Studies fundamentals and applications in automotive electrical, electronics, voltage, current, resistance, series and parallel circuits, magnetism, application of Ohms Law, and wiring diagrams. Develops skills in establishing an electrical base for advanced electrical/electronic courses through the use of meters and test equipment.

**AMS 110 Engine Fundamentals & Overhaul 4.5(2-5)**

Studies will include engine principles, design construction and operation. Skill development of proper service procedures of modern gas engines will be stressed. The student will remove and replace an engine from a car or light truck. They will also disassemble and reassemble a complete engine with emphasis on manufacturer’s specifications and procedures.

**AMS 116 Electrical Systems I: Electrical Accessories 3(2-1)**

Studies lighting systems, instruments, warning devices, horn, and other accessory circuits using wiring diagrams. Develops skills in diagnosis, adjustment and repair of accessory and convenience circuits.

Prerequisite: AMS 104 (may be taken concurrently) or Instructor approval

**AMS 124 Automotive Heating & Air Conditioning 4(2-3)**

Studies passenger car and light truck cooling, heating and air conditioning system operation and diagnosis. Will also cover the 134A system service. Develops skills in diagnosis and repair of the cooling, heating and air conditioning system components.

**AMS 125 Engine Performance I 5(2-6)**

Studies review of basic electricity and magnetism, fundamentals of electronics, basic ignition systems, basic fuel systems and introduction to emission systems. This course establishes a base for advanced work in AMS 126.

**AMS 126 Engine Performance II 5(2-6)**

Studies units of instruction on G.M., Ford and Chrysler throttle body and multi-port fuel injection systems. Also covers distributorless ignition systems and OBD II operation and service. The students will be performing operational tests on late model cars using scan tools and other special test tools. They will be doing drivability testing and troubleshooting on late model cars.

Prerequisites: AMS 104, AMS 125, OR State certified in engine tune-up area

**AMS 205 Steering & Suspension Systems 4(2-4)**

Studies suspension and steering systems. Skill development will be focused on subframe alignment, steering, suspension, and four-wheel alignment.

**AMS 206 Brakes 4(2-4)**

Studies brake systems. Skill development will be focused on drum, disc, hydraulic, power assist, and anti-lock brake systems.

**AMS 214 Automatic Transmissions 4.5(2-5.5)**

Studies passenger car and light truck automatic transmissions terminology, operation, service and diagnosis. Develops skills in service and repair of passenger car and light truck conventional and computer-shifted front-wheel and rear-wheel drive transmissions.

**AMS 222 Manual Transmissions 4(2-4)**

Studies passenger car and light truck clutches, manual transmissions, drive shafts, differentials, transaxles, front-drive axles, and transfer cases operation, service and diagnosis. Develops skills in diagnosis and service of clutches, manual transmissions, drive shafts, differentials, transaxles, front-drive axles, and transfer cases.
AMS 223 Electrical Systems II: 4(2-4)
Studies battery service, cranking systems, and charging systems. Develops skills in diagnosis, adjustment and repair of battery, cranking and charging systems.

AMS 232 Automotive Tech Internship 3(3-0)
Internship is a capstone course planned for the last semester of the Associate in Applied Science: Automotive Technology Degree. The students will be employed in an approved internship position selected by the college coordinator and faculty. A waiver may be allowed for the work component only with equivalent previous/present work experience as determined by the coordinator. Documentation by the employer will be required.

Prerequisite: The student must have completed at least 45 credit hours of program with remaining courses concurrent to Internship and completion of MID 150.

AMS 295 Special Topics 3(3-0)
This course is designed to investigate various topics in Automotive Technology that are not included in current courses. Topics will be announced. This course is offered based on demand.

ANT 170 Introduction to Cultural Anthropology 3(3-0)
The student is introduced to the process of culture evolution as well as other anthropological theories. The purpose is to give the student an understanding of the underlying unity of the human experience while, at the same time, providing insight into cultural variability.

ART 105 Drawing I-Introductory 3(3-0)
This course focuses on the development of observational skills and drawing techniques in black and white media. Students will explore line, value, shape, texture, and perspective through the use of still life, landscape and the human figure.

ART 110 Basic Photography 3(3-0)
This course is designed for persons wanting a working knowledge of cameras, lenses, and fundamentals of photography. Topics covered include: f stops, shutter speeds, depth of field, film selection, composition, electronic flashes, and other basics. Students will be introduced to the black and white darkroom where they will develop film and produce prints.

ART 115 Design I 3(3-0)
This course focuses on the basic elements and principles of two-dimensional design. Students will be introduced to the design process for creative problem solving and visual communication using a variety of media.

ART 130 Painting I 3(3-0)
An introduction to painting with the exploration of media, techniques, and the concepts of space, form, and color.

ART 135 Graphic Design I 3(3-0)
An introduction to the concepts and techniques of visual communication. The focus is on typography, page layout, grid structure, production requirements, design history and the design problem-solving process.

ART 137 Digital Photography 3(3-0)
An introduction to digital photography and computer software used in photo manipulations. Students will learn various techniques in creating enhanced images, including color balance, sizing, sharpening. Students will learn how to download images from digital cameras and to scan photographic prints and film. Students will learn correct file formats for output and print management. Discussions will also include composition, lighting, and personal creativity.

Prerequisites: ART 110 or permission of instructor

ART 150 Printmaking 3(3-0)
Introduction to the basic techniques of woodcut and printing as a fine art.

ART 152 Introduction to Website Design 3(3-0)
This course introduces the fundamentals of web design and development. Students will explore web technology topics and learn how to use HTML, CSS, JavaScript, and related technologies to construct web pages. As the final course outcome, students will build their own online portfolio or a website that acts as an individual portfolio piece. ART 152 is also cross-listed as CIS 135. Credit may not be earned in both classes.

ART 205 Drawing II 3(3-0)
A concentration of experimental media, techniques, spatial relationships, and conceptual processes of drawing.
Prerequisite: ART 105

ART 206 Comic Book and Graphic Novel Illustration 3(3-0)
This course is designed to give students a comprehensive introduction into the concepts and techniques used in the creation of comics and sequential art. Students will explore character development, layout, timing and illustration styles used in this specialized field, with specific focus on both print and digital media outlets.
ART 207 Comic Book and Graphic Novel Illustration II 3(3-0)
Students will have an opportunity to further explore the basic elements learned in ART 206, Comic Book and Graphic Novel Illustration. Students will write and illustrate their own original work. Emphasis is placed on the development of character design and storytelling skills, as well as the development of creative attitudes and concepts.
Prerequisite: ART 206

ART 210 Illustration 3(3-0)
Development of conceptual and technical skills in traditional and digital media for reproduction.
Prerequisites: ART 235, ART 205

ART 211 Page Layout I 3(3-0)
This course introduces the student to the software and tools used in page layout. Emphasis is on learning the software and tools and applying basic design principles in the production of files for final output. Students will learn the fundamentals of page layout, typography, effective use of color, proofing, and preparing print ready documents.

ART 215 Design II 3(3-0)
Continuation of Design I, elements and principles of two-dimensional design. Introduction to three-dimensional design through problem-solving exercises.
Prerequisite: ART 115

ART 220 Figure Drawing 3(3-0)
Students will learn to draw the human figure based on an understanding of anatomy, proportion, perspective, and the effect of light.
Prerequisite: ART 205 or permission of Instructor.

ART 230 Painting II 3(3-0)
A continuation of Painting I introducing more advanced techniques and media.
Prerequisite: ART 130

ART 235 Graphic Design II 3(3-0)
A continuation of ART 135 with an emphasis on the integration of type and image in visual communication. Focuses on an exploration of tools, techniques, and hands-on skills required in the creation of professional illustrations and graphics.
Prerequisites: ART 135

ART 236 Graphic Design III 3(3-0)
Continuation of ART 235 with an emphasis on refining problem-solving skills required in a professional environment. Focuses on research and analysis of visual communication, as well as the creation of portfolio-building projects.
Prerequisite: ART 235 or permission of Instructor

ART 237 Photography II 3(3-0)
This course is a continuation of ART 110 Basic Photography. Students will be given advanced projects in exposure, lighting, motion control, depth control, film and composition. Projects will be completed in black and white film, with the students processing and printing their own projects.
Prerequisites: ART 110

ART 239 Page Layout II 3(3-0)
This course is a continuation of ART 211 Page Layout I. Students will be assigned advanced page layout projects. This course will examine all aspects of production as they relate to print, including correct document construction, color space and color systems, separations, preflight, print production and paper considerations. Projects will focus on the use of effective design principles, proper file preparation, preflight of files, and production process.
Prerequisite: ART 211

ART 240 Studio Problems in Graphic Design 3(3-0)
An opportunity for students to work independently on projects related to the graphic design industry. Included in the course will be individual assistance in preparing a portfolio for seeking employment or further education.
Prerequisites: ART 110, 130, 205, 215, 236, and 239

ART 241 Portfolio 1(1-0)
In this course the student will be taken through the process of preparing an art portfolio, resume and artist statement based on their individual needs for the purpose of transfer to a 4-year college for further study or promotion of their artwork. Students will be guided through the process of selection of artwork, documentation, and compilation of the portfolio as well as the writing of a resume and artist statement.
Prerequisite: Permission of instructor

ART 245 Art in the Elementary School 3(3-0)
An investigation of how art fits into the Elementary School Curriculum and what its impact is on all elementary children. To be presented through lecture, readings, slides or prints, and a team teaching experience by all participants. (*Note: Please be advised that ART 245 will transfer to Central Michigan University as ART 345 only if: 1) the student has successfully completed EDU 107; and 2) 45 clock hours of pre-professional experience in K-12 classroom.)

ART 247 Contemporary Photography 3(3-0)
This course is designed for the student who has completed ART 110 and ART 137 and now wishes additional hands on practical experience using the concepts and principles learned in these classes. Students will learn more advanced techniques and will be able to apply these techniques to projects a professional photographer might encounter.
Prerequisites: ART 110 and ART 137
ART 252 Website Design II 3(3-0)
This course applies advanced web design and development techniques. Students will explore open source content management systems and use advanced HTML, CSS, JavaScript, and related web technologies to customize the functionality and appearance of dynamic websites. As the final course outcome, students will implement their own CMS with a responsive design and e-commerce features. ART 252 is also cross-listed as CIS 235. Credit may not be earned in both classes.
Prerequisite: CIS 135 or ART 152.

ART 254 Motion Graphics 3(3-0)
This course will focus on video pre and post-production for the purpose of commercial use, including video editing, sound production, operating production equipment, lighting and industry standard digital effects. Students will apply media and dynamic rich content to their motion graphics and video projects. Final course outcome is a video portfolio.

ART 255 Emerging Web Technologies 3(3-0)
This course is a continuation of ART 252 Website Design II. It introduces advanced, emerging technologies in web design-multimedia design and current emerging web technologies. This is a growing field and will give graphic design students opportunities to expand their background in current web technologies. The final course outcome is a functional, online portfolio.
Prerequisite: ART 252

ART 256 Business in Art-Entrepreneur 3(3-0)
This course will train students in the business of art, graphic design and in an introduction to small business ownership. It is designed for students seeking key opportunities to attain professional development, self-employment and administrative potential in the art and design industry or to prepare students to transfer their coursework towards further undergraduate study.
Prerequisite: ART.252 or permission of instructor.

ART 280 Independent Study in Art I 3(3-0)
An opportunity for advanced students to work with an instructor on individualized projects in various selected media.
Prerequisite: Permission of the Instructor.

ART 281 Internship I 3(1-0)
Designed to provide on-site work experience in a business environment. Under cooperative supervision by the College and the work-site Supervisor, students will further develop skills and gain training in the design field.
Prerequisite: Permission of the Internship Coordinator.

ART 282 Internship II 3(1-0)
Continuation of ART 281. Designed to provide on-site work experience in a business environment. Under cooperative supervision by the College and the work-site Supervisor, students will further develop skills and gain training in the design field.
Prerequisites: ART 281 and permission of the Internship Coordinator

ART 285 Independent Study in Art II 3(3-0)
Continuation of ART 280.
Prerequisites: ART 280 and permission of the Instructor

BIO 100 Introduction to Biology 4(3-2)
BIO 100 is a non-major, introductory course in Biology for students who have not had any previous Biology instruction and have no intention of obtaining a Biology or Health-related degree. Students will apply fundamental principles of Biology to evaluate and better understand current life sciences issues.

BIO 101 College Biology 4(3-2)
Survey of major topics in biology, with emphasis on cell structure, physiology, reproduction, genetics, evolution, behavior, and morphology of plants and animals.

BIO 110 Concepts in Microbiology 1(1-0)
This course is an introductory study of microorganisms such as bacteria, fungi, algae, viruses, & protozoa. The disease process involving these microorganisms will also be studied.
Prerequisite: BIO 101 with a minimum grade of C.

BIO 111 Fundamentals of Cell Biology and Molecular Biology 4(3-3)
This course provides students a foundation in cellular biology. The course will cover the structure and function of cells including the basic chemistry of biomolecules, prokaryotic and eukaryotic cell structure, cell communication, membrane transport, bioenergetics, photosynthesis, respiration, cell division, and gene expression. The laboratory portion of the course will include experiments that introduce students to the scientific processes employed by biologists.

BIO 112 Fundamentals of Evolution and Diversity 4(3-3)
This course provides students foundational knowledge in evolution and diversity. The course will cover patterns of
inheritance, basic evolutionary principles, speciation, and the diversity of life. The laboratory portion of the course will include experiments that introduce students to the scientific processes employed by biologists.

**BIO 120 Introduction to Human Disease 3(3-0)**

This course is designed to introduce the student to the structure of common diseases, signs, symptoms, causes and effects, as well as treatment. Students will learn how the different diseases relate to the different body systems, and other conditions.

*ALH 100 Recommended

**BIO 131 Basic Anatomy & Physiology 3(3-0)**

This is an introductory course to Anatomy and Physiology. It is assumed that students enrolling in this course have limited background in chemistry and biological science. The major topics presented in the course are biological principles, skeletal, muscular, integumentary, nervous, circulatory, respiratory, digestive, excretory, endocrine, and reproductive organ systems.

Prerequisite: BIO 101 with a minimum grade of C.

**BIO 138 Human Anatomy and Physiology 6(4-4)**

This course provides students with an intensive, in-depth introduction to the structure and function of all human body organ systems. The emphasis is on homeostasis of body systems under normal structures and function, with the inclusion of some pathologies. The laboratory portion includes dissections, study of anatomical models and slides, and physiological experiments.

Prerequisite: BIO 101 with a minimum grade of C, or successful completion of the BIO 138 entrance exam.

**BIO 141 Anatomy & Physiology I 4(3-2)**

A lecture and laboratory course dealing with the anatomy and physiology of the human body with emphasis on homeostasis. Topics include skeletal, muscular, integumentary, nervous system.

Prerequisite: BIO 101 with a minimum grade of C.

**BIO 142 Anatomy & Physiology II 4(3-2)**

This course is a continuation of BIO 141. Topics include respiratory, excretory, endocrine, reproductive, circulatory and digestive systems. Emphasis is on physiology and integration of the systems of the body.

Prerequisite: BIO 141

**BIO 201 Botany 4(3-2)**

Structure and function of major groups of plants with emphasis on metabolism and reproduction.

Prerequisite: BIO 101 with a minimum grade of C.

**BIO 202 Field Ecology 3(3-2)**

An introduction to a field study of basic ecology, with emphasis on the interactions between plants, animals, humans, and the environment.

**BIO 203 Zoology 4(3-2)**

Topics cover fundamental principles of zoology including taxonomy, evolution, and characteristics of major animal phyla with emphasis on anatomy and physiology of selected groups. Lab will support exploration of animal groups using microscopic observations and dissections of preserved specimens.

Prerequisite: BIO 101 with a minimum grade of C.

**BIO 204 Human Genetics 3(3-0)**

This is an introductory course dealing with principles of inheritance as they apply to humans. This course assumes no prior background in biology or chemistry. The topics considered are basic genetic principles, molecular basis of inheritance, regulation of gene expression, mutation, and the application of these principles to human heredity. Special emphasis is given to genetic disorders and the new technologies developed to deal with them.

**BIO 210 Microbiology 4(3-3)**

Microbiology involves a study of the bacteria, fungi, algae, viruses, protozoa, and other related micro-organisms and their relationship to our society. The laboratory acquaints the student with standard handling and culture techniques of most of these organisms, the preparation of culture media, classification techniques, representative micro-organisms (living and prepared slides) of the various groups, standard staining methods, and a number of biochemical tests.

Prerequisite: BIO 101 or a college course equivalent to BIO 101 or a grade of B or better, within the past 3 years in a High School Advanced Placement Biology course.

**BIO 215 Radiation Biology 1(1-0)**

This course is an introductory study of the biological effects of exposure to ionizing radiation. Topics include factors affecting radiosensitivity, hematologic effects, and radiation induced malignancy.

Prerequisite: BIO 101

**BIO 221 Nature Study 3(2-2)**

Practical knowledge of the out-of-doors is stressed. Collection and identification of plants and animals and field activities included.

Prerequisite: BIO 101 recommended

**BIO 245 Advanced Anatomy & Physiology/ Intro to Pathophysiology 4(4-0)**

This course is an advanced study of the concept of Anatomy & Physiology with an emphasis on the disease process. It is intended for those students that have previously completed Anatomy & Physiology I & II more than 5 years ago and less than 10 years ago, and also for those students who would like to increase their knowledge of this subject matter. Pre-RAD or Pre-NUR students must complete this course with a grade of B- or better to qualify for admission into the program.

Prerequisite: BIO 141 & 142 completed less than 10 years ago.
BIO 268 Independent Study in Biology 1(1-0)
This course is designed for students who desire to advance their understanding and challenge their ability in specialized areas of biology. Library, laboratory and/or field research is required, as is a written report at the completion of the course. Prerequisites: Satisfactory completion of at least one laboratory biology course and permission of the Instructor.

BIO 290 - 299 Selected Topics 4 (3-2)
Courses designed to investigate various topics in Biology not included in current courses. Topics will be announced.

(BIS) BUSINESS INFORMATION SYSTEMS

BIS 120 Office Mathematics 3(3-0)
This course covers basic mathematical operations & concepts as applied to a variety of business and personal situations. Examples of topics: review of arithmetic operations, fractions, decimals, mortgages, taxes, checking accounts, payroll, & consumer & business credit.

BIS 126 Introduction to Medical Transcription 3(3-0)
This course serves as an introduction to processing medical reports. Students prepare consultation reports, history and physical examination reports, operative reports, discharge summary reports, and special procedure reports including magnetic resonance imaging (MRI) reports, computerized axial tomography (CAT) reports, and sonogram reports. An integrated instructional approach is used where students learn medical terms as they appear in medical reports and relate those terms to the pathologies being treated. This course is an introduction to machine transcription for students pursuing the Associate in Business Degree: Medical Transcriptionist. Prerequisite: BIS 140 or competency. Corequisite: ALH 100 recommended.

BIS 127 Applied Office Accounting 4(4-0)
This course covers basic accounting skills needed in the medical and legal office. Emphasis is on both the how and why of accounting and on performing the accounting function. A practice set will be used to simulate accounting transactions in the medical or legal office-based on the student’s program emphasis. Prerequisite: BIS 120 Prerequisite for Medical Assistant only: MAT 104.

BIS 136 Terminology and Proofreading 3(3-0)
This course helps the student build a better vocabulary & improve spelling & proofreading skills. Three hundred groups of commonly confused words & special lists of frequently misspelled terms are studied. Topics include working with the dictionary, pronunciation, phonetics, word division, prefixes and suffixes, plurals & possessives, & specialized & reference vocabularies. Students improve proofreading skills by identifying errors in typing, spelling, grammar, punctuation, capitalization, format, numbers, word division, & content using appropriate proofreader’s marks. Prerequisites: BIS 164, ENG 111 may be taken concurrently.

BIS 138 Basic Legal Terminology 3(3-0)
This course is designed to give students knowledge and understanding of approximately 800 terms commonly used in the legal field. The students will learn to spell and define the terms and to use them in a legal context. Students will learn correct pronunciation by studying pronunciation guides taken from the dictionary and by listening to CDs. Topics covered include courts and legal systems; litigation, pretrial, trial, proceedings, verdicts, judgements, and appeals; civil actions; criminal law; probate, wills and estates; real property; contracts; leases; domestic relations, marriage, separation, and divorce; commercial paper; bankruptcy; agency; equity; partnerships; and corporations. Prerequisites: BIS 140 or equivalent or concurrent enrollment, BIS 164 recommended or concurrent enrollment.

BIS 140 Beginning Word Processing/Keyboarding 3(3-0)
This course is designed to build a marketable keyboarding (typewriting) skill. Business letters, business forms, speed, and accuracy are stressed. Students will use the most current word processing software to create documents. Speed ranges of 25-40 words a minute are needed to pass.

BIS 142 Intermediate Word Processing/Keyboarding 3(3-0)
This course is designed to build a marketable keyboarding (typewriting) skill. Business letters, business forms, speed, and accuracy are stressed. Students will use the most current word processing software to create documents. Speed ranges of 40-55 words a minute are needed to pass. Prerequisite: BIS 140 or equivalent.

BIS 164 Business Communications I 3(3-0)
Students will learn/review basic grammar rules, punctuation rules, and sentence structure. Students will use the computer and current word processing software for realistic business office applications of the rules. Students will be introduced to machine transcription and will learn to use office reference manuals. Prerequisite: Recommend concurrent enrollment in BIS 140 or knowledge of correct keyboarding techniques.

BIS 200 Advanced Word Processing Applications 3(3-0)
This course gives students hands-on experience and exposure to a wide variety of advanced word processing applications using computers and the most current word processing software. The advanced word processing features included teach students the skills needed to pass expert certification exams. These
exams validate a student's skills, and supply objective proof to an employer, or prospective employer, that the student knows how to use the software efficiently and productively. Microcomputers are used to produce a wide variety of documents, as well as ways in which the software program interacts with Windows and the Internet. Practice exercises and assignments are the primary source of instruction on the microcomputer. Microsoft Office Specialist (MOS) approved software is used to provide students with skills needed to complete the MOS Expert Certification Exam.

Prerequisites: BIS 140 or equivalent, BIS 130 recommended

**BIS 230 Written Correspondence I 3(3-0)**
Using the computer, current word processing software, and a variety of reference materials, students develop skill and accuracy in transcribing from CDs and producing mailable documents. Transcription begins with sentences and expands to business letters and other correspondence. Emphasis is placed on correct spelling, grammar, and punctuation skills and proofreading.

Prerequisites: ENG 111, CIS 100, BIS 136, BIS 142, BIS 164

**BIS 234 Written Correspondence II 3(3-0)**
This course is an application of skills learned in business communications, English, keyboarding/word processing, and other BIS courses. The students transfer material into high-quality (mailable) keyboarded documents using computers, current word processing software, CDs, and a variety of reference materials. To provide a realistic experience, a word processing simulation is used.

Prerequisites: BIS 200, BIS 230, BIS 240

**BIS 236 Medical Transcription I 3(3-0)**
This course is an intense application of skills learned in business communications, English, keyboarding, transcription, & medical terminology. The students transcribe dictated material into high-quality (mailable/usable) documents using computers, current word processing software, transcribing machines, & a variety of reference materials. To provide a realistic experience, a medical simulation is used along with dictated documents on CDs.

Prerequisites: ALH 100, BIS 142, BIS 230

**BIS 238 Legal Transcription 3(3-0)**
This course is an intense application of skills learned in business communications, English, keyboarding/word processing, transcription, and legal terminology. The student will transcribe dictated material into high-quality (mailable) documents using computers, current word processing software, cassette transcribing machines, and a variety of reference materials. A legal simulation will be used along with dictated documents on CD recordings.

Prerequisites: BIS 138, BIS 200, BIS 230, BIS 240

**BIS 240 Advanced Word Processing/Keyboarding 3(3-0)**
Advanced keyboarding (typewriting) techniques as related to mailable production work are emphasized. Problem-solving ability is developed. To provide a realistic experience, a word processing simulation is used. Speed ranges from 55 to 70 words a minute are needed to pass.

Prerequisites: ENG 111, BIS 136, BIS 142, BIS 200

**BIS 246 Medical Transcription II 3(3-0)**
This course is a continuation of BIS 236 Medical Transcription. Students continue to build their medical terminology knowledge and to transcribe and format high-quality (mailable/usable) medical documents according to guidelines set by the American Association for Medical Transcription (AAMT). Students use computers, current word processing software, CDs, and a variety of reference materials. A medical simulation is used, giving students opportunities to hear and transcribe realistic dictation in many medical specialties as dictated by medical professionals from various ethnic groups.

Prerequisite: BIS 236

**BIS 250 Records Management 3(3-0)**
Emphasis is given to clear-cut rules established by the Association of Records Managers and Administrators (ARMA) for the alphabetic indexing and cross-referencing methods (the foundation of records storage methods), as well as the numeric, geographic, chronological, and subject methods. Students are provided realistic records management situations through the use of a simulation. Topics include creation, storage, retrieval, retention, and disposal of records as well as careers in records management. In addition to traditional/paper storage, students use the computer and current software for information storage and retrieval.

Prerequisites: CIS 100, BIS 140 or equivalent

**BIS 254 Office Procedures 3(3-0)**
This is a capstone course planned for the last semester of the student's program and is an intense application of skills learned in previous courses. Topics include dress and grooming for business, human relations, telephone etiquette, dictation techniques, job search strategies, effective research and oral presentation techniques, interview preparation, self-analysis and self-improvement, professionalism, and problem solving. Students participate in mock employment interviews and program assessment exit interviews with BIS advisory committee members. Other forms of BIS program assessment may be required. The student continues with preparation of high-quality (mailable) documents from both dictated and rough draft materials.

**BIS 255 Medical Office Procedures 3(3-0)**
This is a course that introduces and teaches medical assisting administrative tasks; teaches records management, medical communications, and scheduling skills; and describes procedures for preparing patients' charts and bills. Medical
practice management and finances are also addressed. Multi-day simulations provide real-world experience with physician dictation. Topics include dress and grooming for business, human relations, telephone etiquette, dictation techniques, job search strategies, effective research and oral presentation techniques, interview preparation, self-analysis and self-improvement interviews.

Prerequisites: CIS 100, BIS 140

**BIS 256 Medical Transcription III 3(3-0)**

This course is a continuation of BIS 246 Medical Transcription II and is the capstone course on the Associate in Business Degree: Medical Transcriptionist program. Students continue to build their knowledge of medical terminology and to transcribe and format high-quality medical records according to guidelines set by the American Association for Medical Transcription (AAMT). Students use microcomputers, word processing software, CDs, and a variety of reference materials. A medical simulation is used, giving students opportunities to hear and transcribe realistic dictation in several specialties as dictated by medical professionals from various ethnic groups. Students are also given critical-thinking and problem-solving scenarios.

Prerequisite: BIS 246

**BIS 260 Business Information Systems Internship 3(3-0)**

Internship is a capstone course planned for the last semester of the Associate in Applied Science: Business Information Systems Degree. The students will be employed in an approved internship position selected by the college coordinator and faculty. A waiver may be allowed for the work component only with equivalent previous/present work experience as determined by the coordinator. Documentation by the employer will be required.

Prerequisite: Prerequisites: In order to be placed in a training site and enrolled in BIS 260, the student should have completed the first three semesters of the program and completion of MID 150.

**BIS 264 Business Communications II 3(3-0)**

This course studies approaches to verbal and nonverbal communications in business-related situations. Students will prepare written correspondence including business letters and formal business reports. Students will learn techniques for effective oral presentations including the basic creation and use of PowerPoint slides. Internet use is emphasized throughout the course.

Prerequisites: BIS 164 or ENG 111

**BIS 290 - 299 Special Topics 3(3-0)**

These courses are designed to investigate various topics in Business Information Systems that are not included in current courses. Topics will be announced. These courses are offered based on demand.
given to job analysis and evaluation and union-management relationships.

Prerequisite: BUS 122

**BUS 225 International Business 3(3-0)**

This course analyzes environmental changes as the firm expands globally. Emphasis is placed on the understanding and utilization of diversity and ethics in the development, operation and international expansion of the firm. Multicultural work environments, employment and labor issues, domestic and international law, global marketing, trade and finance will be examined.

Prerequisites: None

**BUS 231 Principles of Advertising 3(3-0)**

A survey of advertising as an instrument of modern business including various forms of advertising. Particular attention is paid to advertising for small and medium-sized businesses engaged in providing services and goods to the consumer.

**BUS 241 Supervision and Personnel Administration 3(3-0)**

Covers the role of supervision and personnel administration in large and small organizations. Develops techniques for hiring, training, developing, motivation, and evaluating of personnel. Covers wage, salary, and fringe-benefit administration.

**BUS 250 Entrepreneurial Management 3(3-0)**

A course for those persons interested in operating a small business. Course content includes financial, marketing, production management, and legal and governmental considerations which the proprietor of a successful business must manage. The course places emphasis on analysis of actual small business case studies.

**BUS 255 Entrepreneurial Finance 3(3-0)**

A course designed for persons desiring to operate or presently operating a small business. Course content includes financial, marketing, production management, and legal and governmental considerations which the proprietor of a successful business must manage. The course places emphasis on analysis of actual small business case studies.

Prerequisite: ACC 201 and MAT 107. It is recommended that students also have completed MAT 116, BUS 151, and either ECO 201 or ECO 202.

**BUS 289 Business Practicum 1(1-0)**

This is a capstone course that will assess the graduating students’ ability to apply the acquired knowledge in order to solve a real-life business situation. Students will demonstrate the ability to research the market in order to identify profitable opportunities to introduce a specific product in the Mid-Michigan area. Students will articulate their findings in the form of a business plan, which will consist of the company's mission, organizational chart, marketing plan, and pro-forma financial statements.

Prerequisites: CIS 100, ACC 201, BUS 122, BUS 151, BUS 153, BUS 162, BUS 231, and either ECO 201 or ECO 202.

**BUS 291 Business Internship 3(1-0)**

Students will work in part-time jobs directly related to their degree programs. Training sessions are held with the employer, instructor, and student. The internship will be limited to students within one semester of graduation and will be used as a capstone course for Management & Marketing, Hospitality Management, and Small Business Management majors only.

Prerequisite: Permission of the Internship Coordinator

**BUS 293 - 299 Current Topics in Business 3(3-0)**

Courses designed to investigate various topics in Business not included in current courses. Topics will be announced.

**CHM 105 Introductory Chemistry 4(3-2)**

An elementary study of general chemistry. No previous chemistry background is necessary. The course deals with basic chemical principles and their application to inorganic chemistry. Designed for majors in liberal arts, business, pre-nursing, and to prepare students for CHM 106 or CHM 111. Two hours per week of lab work are included. Corequisite: MAT 104 or equivalent

**CHM 106 Biochemistry for Allied Health 4(3-2)**

Building on a background of basic inorganic chemistry, this course is intended to serve the needs of students in the ADN program and other allied health areas. The course includes an introduction into organic compounds, carbohydrates, fats, proteins, vitamins, hormones, enzymes, nucleic acids, and the energy relationships in metabolic processes. Two hours per week of lab work are included.

Prerequisite: Proven competency in basic chemistry by earning a C or better in CHM 105 (or an equivalent college chemistry course), earning a B or better in a High School chemistry course (within the last 3 years), or with permission from the instructor.

**CHM 111 General College Chemistry I 5(4-3)**

CHM 111 serves as the first semester course in a standard first year College Chemistry sequence. This course covers fundamental concepts in Chemistry including atomic structure, molecular structure, chemical reactions, fundamentals of thermodynamics, measurement and chemical calculations, gases, and solution chemistry. The lab component provides a hands on opportunity to investigate these concepts.

Prerequisites: CHM 105 with a minimum grade of C (or one year of High School Chemistry with a minimum grade of C)

Corequisite: MAT 105 or two years of High School Algebra
**CHM 112 General College Chemistry II 5(4-3)**

This course serves as the second semester in a standard first year Chemistry sequence. This course covers fundamental concepts in Chemistry including intermolecular forces, solutions, kinetics, equilibrium, acid/base chemistry, thermodynamics, and electrochemistry. The lab component provides a student a hands on opportunity to investigate these concepts.

Prerequisite: CHM 111 (minimum grade of C) and MAT 105

**CHM 245 Organic Chemistry I - Lecture 4(4-0)**

Organic Chemistry I is the first course in a two semester sequence of organic chemistry for students who are considering careers in some field of science or engineering. It includes the study of the nomenclature, physical and spectral properties, structure, stereochemistry, spectroscopy, and reactions (with their mechanisms) of saturated and unsaturated hydrocarbons and alkyl halides. It is recommended that this course be taken concurrently with CHM 255 - Chemistry I Lab.

Prerequisite: CHM 112 (or CHM 111 with a minimum grade of B)

**CHM 246 Organic Chemistry II - Lecture 4(4-0)**

Organic Chemistry II is the second course in a two semester sequence of organic chemistry for students who are considering careers in some field of science, pre-professional health studies or engineering. It is a continuation of CHM 245 Organic Chemistry I. This course includes the study of the nomenclature, physical and spectral properties, structure, stereochemistry, and reactions (with their mechanisms) of conjugated dienes, benzene, alcohols, ethers, and carbonyl groups, featuring applications to biochemistry. Students will build on the core knowledge from CHM 245 to design more elaborate synthetic pathways and to create more complex mechanistic models for describing organic reaction pathways. It is recommended that this course be taken concurrently with CHM 256 Organic Chemistry II - Laboratory.

Prerequisite: CHM 245

**CHM 255 Organic Chemistry I - Lab 1(1-3)**

Organic Chemistry Laboratory 1 is the first in a two semester sequence of organic chemistry laboratory courses for students who are considering careers in some field of science, pre-professional health studies or engineering. It addresses the mastery of advanced laboratory techniques for the manipulation of organic compounds, including synthesis, separations and purifications. The characterization of organic materials by physical and spectroscopic methods is also addressed. Each week students will conduct an experiment in the lab that is meant to help them understand organic chemistry principles and also to gain experience in scientific research methods. This laboratory course is designed to accompany CHM 245.

Prerequisite: CHM 112 (or CHM 111 with a minimum grade of B)

**CHM 256 Organic Chemistry II - Lab 1(1-3)**

Organic Chemistry II - Laboratory is the second in a two semester sequence of organic chemistry laboratory courses for students who are considering careers in some field of science, pre-professional health studies or engineering. It addresses the use of previously acquired advanced laboratory techniques for the manipulation of organic compounds, including synthesis, separations and purifications. The characterization of organic materials by physical and spectroscopic methods is also addressed. Each week students will conduct an experiment in the lab that is meant to help them understand organic chemistry principles and also to gain experience in scientific research methods. This laboratory course is designed to accompany CHM 246.

Prerequisite: CHM 255

**CHM 290 - 299 Selected Topics 4(3-2)**

Courses designed to investigate various topics in Chemistry not included in current courses. Topics will be announced.

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### (CIS) COMPUTER INFORMATION SYSTEMS

**CIS 100 Intro. to Information Systems 3(3-0)**

This course is designed for students across the curriculum. CIS 100 will emphasize how the computer is used as a conceptual basis for problem solving and the role each hardware and software component plays in the computer process. Students will do online research using the internet and electronic libraries. In addition, this course takes students to a higher level of learning in some of the most widely used application programs. Outside lab work is required.

Prerequisite: Touch keyboarding skills recommended

**CIS 110 Programming Logic 3(3-0)**

This course serves as a general introduction for students to acquire a foundation of knowledge and skills with computer programming concepts. Students will be introduced to programming concepts such as logic and flow charting as well as some basic programming techniques.

**CIS 125 Database Systems 3(1.5-1.5)**

This course covers relational database concepts and tools focused in an Oracle environment. Specifically, relational database concepts (rows, tables, and keys), table creation/ modification (DDL and SQL), PL/SQL, forms, reports, and database administration tasks are presented. In-class work will consist of 1 ½ hours of lecture followed by 1 ½ hours of practical application. Required software is available on computers at the college; if students wish to complete assignments at home; they will need to procure the correct software.

Prerequisite: CIS 100, CIS 130
CIS 130 Applications With Microcomputers 3(3-0)
A study of various computer applications as applied to business problems. Applications covered include spreadsheets, windows presentation programs, and databases. Prerequisite: CIS 100 with a minimum grade of C

CIS 131 .Net Programming I 3(3-0)
This course is an introduction to developing applications using the .NET framework. The focus is on designing and developing .NET applications within an organization. Prerequisite: MAT 104

CIS 135 Introduction to Website Design 3(3-0)
This course introduces the fundamentals of web design and development. Students will explore web technology topics and learn how to use HTML, CSS, JavaScript, and related technologies to construct web pages. As the final course outcome, students will build their own online portfolio or a website that acts as an individual portfolio piece. ART 152 is also cross-listed as CIS 135. Credit may not be earned in both classes.

CIS 155 Computer Operating Systems 3(3-1.5)
A detailed study of the Windows operating system. Windows terms, commands, installation and optimizing techniques will be covered. In addition to the classroom work, each student is required to do a minimum of 1 1/2 hours of individual laboratory work per week.

CIS 170 Networking Essentials 3(3-0)
This course serves as a general introduction for students to acquire a foundation in current network technologies for local area networks (LANs), wide area networks (WANs), and the Internet. The course provides an introduction to the hardware, software, terminology, components, design, and connections of a network, as well as the topologies and protocols for LANs. It covers LAN-user concepts and the basic functions of system administration and operation.

CIS 175 Computer Programming I 3(3-0)
This course covers algorithm design and development. An introduction to the design and development of computer programs using object-oriented programming languages is included. Prerequisite: MAT 104 (or higher MAT course) and CIS 110

CIS 185 Introduction to Cybersecurity 3(3-0)
This course serves as a general introduction for students to acquire a foundation of knowledge and skills with current cybersecurity threats, vulnerabilities, and security concepts. Students will develop an in-depth knowledge of systems security, access control, network infrastructure, security assessments, security audits, cryptography and organizational security. Students will implement and monitor security on networks, applications, and operating systems. This course is designed to help students prepare for the CompTIA Security+ certification exam. Prerequisites: CIS 170

CIS 190 Cisco Internetworking I 3(3-0)
This course is the first in a series of four in the Cisco Networking Academy Program designed to teach students to design, build and maintain computer networks. Fundamentals of computer networks are the primary focus in this course. Corequisite: CIS 170

CIS 195 Cisco Internetworking II 3(3-0)
This course is the second in a series of four in the Cisco Networking Academy Program designed to teach students to design, build and maintain computer networks. Fundamentals of the Cisco IOS (Internetwork Operating System) software and routers are the primary focus in this course. Prerequisite CIS 190

CIS 221 Computers in Business I 3(3-0)
This course provides insight into the applications of the computer in modern business. The student will study the components of a business computer system, typical applications involving mainframe and personal systems, structure, use of files and databases, and the concepts of networking, teleprocessing, and distributed systems; explore the techniques of business computer system development; and also develop skills in using productivity programs such as databases and spreadsheets to build models solving practical business problems. Prerequisite or Corequisite: ACC 201

CIS 231 .NET Programming II 3(3-0)
An intermediate level programming course using the .NET framework. The student will develop their programming techniques using a Windows based programming language in a graphical environment with an emphasis on procedures, menus, arrays, files, and classes. Prerequisites: CIS 131

CIS 235 Website Design II 3(3-0)
This course applies advanced web design and development techniques. Students will explore open source content management systems and use advanced HTML, CSS, JavaScript, and related web technologies to customize the functionality and appearance of dynamic websites. As the final course outcome, students will implement their own CMS with a responsive design and e-commerce features. ART 252 is also cross-listed as CIS 235. Credit may not be earned in both classes. Prerequisite: CIS 135 or ART 152.

CIS 236 Emerging Web Technologies 3(3-0)
This course is a continuation of ART 252 Website Design II. It introduces advanced, emerging technologies in web design/multimedia design and current emerging web technologies. This is a growing field and will give graphic design students opportunities to expand their background in current web technologies. The final course outcome is a functional, online portfolio. Prerequisite: CIS 235 or ART 252.
CIS 260 Systems Analysis 3(3-0)
Introduces the student to the fundamental concepts of systems analysis and design. The role of the systems analyst and the training and skills required to function in this position are presented. Special emphasis is placed upon both written and oral communication skills. The life cycle concept and its application to business systems are discussed. Structured design techniques are emphasized.

CIS 275 Computer Programming II 3(3-0)
A continuation of CIS 175, with an emphasis on elementary data structures, string manipulation, recursion, stacks, queues, linked lists, binary trees, sorting, & searching.
Prerequisite: CIS 175

CIS 280 Computer Information Systems Internship 2(2-0)
Internship is a capstone course planned for the last semester of the Associate in Applied Science: Computer Information Systems Degree. The students will be employed in an approved internship position selected by the college coordinator and faculty. A waiver may be allowed for the work component only with equivalent previous/present work experience as determined by the coordinator. Documentation by the employer will be required.
Prerequisite: The student must have completed at least 45 credit hours in the Associate in Applied Science: Computer Information Systems Degree and completion of MID 150.

CIS 285 Network Cybersecurity 3(3-0)
Students will develop and in-depth, theoretical understanding of network security principles. CIS 285 is a hands-on, career-oriented course with an emphasis on practical experience to help students develop specialized security skills to advance their career opportunities implementing Cisco network security. This course provides an introduction to the core security concepts and skills needed for the installation, troubleshooting, and monitoring of network devices to maintain the integrity, confidentiality, and availability of data and devices. This course is designed to help students prepare for the Implementing Cisco IOS Network Security certification exam.
Prerequisites: CIS 185 and CIS 195

CIS 290 Cisco Internetworking III 3(3-0)
This course is the third in a series of four in the Cisco Networking Academy Program designed to teach students to design, build and maintain computer networks. The focus of this course is on configuring switches and routers; configuring IGRP, Access Lists and IPX on routers.
Prerequisite: CIS 190, CIS 195

CIS 295 Cisco Internetworking IV 3(3-0)
This course is the fourth in a series of four in the Cisco Networking Academy Program designed to teach students to design, build and maintain computer networks. The focus of this course is on Wide Area Networks, PPP, ISDN, Frame Relay and all CCNA Exam-related learning objectives. It is the final preparation for taking the Cisco Certified Networking Associate examination.
Prerequisite: CIS 190, CIS 195, CIS 290

(CJS) CRIMINAL JUSTICE SYSTEM

CJS 200 Introduction to Law Enforcement & Criminal Justice 3(3-0)
An introductory course designed to acquaint the student with the components of the criminal justice system. Corrections, courts, police systems are examined. The criminal justice process is explored in detail. The history, relationships, administration, and philosophy of the criminal justice system is also examined.

CJS 201 Criminal Law for Police Officers 3(3-0)
This course is designed to familiarize persons or refresh law enforcement personnel with the purposes and functions of criminal law in the operation of a law enforcement agency. Topics of discussion include philosophy and source of criminal law, criminal procedure, search and seizure, arrest, specific crimes, judicial procedure, and other topics such as defendant rights.
Prerequisite: CJS 200

CJS 202 Juvenile Law and Procedures 3(3-0)
This course will examine a broad spectrum of trends and causation of juvenile delinquency, specific treatment techniques, ways of controlling and preventing delinquency, and the role of the law enforcement officer in dealing with all aspects of the legal basis of the police officer’s work with juveniles.
Prerequisite: CJS 200

CJS 203 Fundamentals of Supervision & Management in Criminal Justice 3(3-0)
An introductory course designed to acquaint the student with the basics of management and supervision. Criminal Justice roles and responsibilities are examined. Management styles are discussed. Issues of management, operations, employment, training, community relations, and leadership styles all receive attention within this course.

CJS 204 Criminal Investigation 3(3-0)
This course covers the fundamentals of criminal investigation including techniques of surveillance; search at the scene of the crime; collection, recording and preservation of evidence; interviewing witnesses; interrogation of suspects; methods
used in the police science laboratory; and cooperation with other agencies in investigation procedures.

Prerequisite: CJS 201

CJS 205 Evidence and the Police Officer 3(3-0)
A study of the rules of evidence, from its historical development through the present, pertaining to criminal cases. This course provides an examination into the testimonial, documentary and real evidence as discovered, and evaluated by police in anticipation of a criminal trial.

Prerequisite: CJS 201

CJS 206 Police Patrol Operations 3(3-0)
This course provides a study of police patrol and its function. The course includes both the theoretical and functional aspects of patrol function. Emphasis is placed on police patrol responsibilities, its purpose, methods and the different types of police patrol. The student will examine the concept of police patrol to include community policing, types of service calls, interview and reports, the courtroom and testimony, and insights to the technological advancements affecting the patrol officer.

Prerequisite: CJS 200

CJS 215 Police Academy 21(21-693)
Mid Michigan Community College has signed articulation agreements with Delta College and Kirtland Community College whereby the student completes Police Academy coursework on the Delta or Kirtland campus. Students who successfully complete the Police Academy Training at Delta College or Kirtland Community College, will receive Mid Michigan Community College credit. In order to receive credit, a student must submit an official transcript, showing satisfactory completion of the Basic Police Academy, as specified by MCOLES (Michigan Commission on Law Enforcement Standards).

CJS 220 Introduction to Corrections 3(3-0)
A study of the history, impact, and philosophy of community-based corrections services including sentencing alternatives and process, probation, parole, and imprisonment. Prisoner rights and offender profiles are also examined.

CJS 221 Legal Issues in Corrections 3(3-0)
An introduction to the laws and procedures regarding federal and state constitutional rights, criminal case processing, court organization, and prisoner rights.

CJS 222 Correctional Facilities and Institutions 3(3-0)
A study of American prisons and jails including their purpose, treatment program availability, organizational structure, and custodial and security requirements. The effect on the incarcerated inmate as well as future correctional considerations are also examined.

Prerequisite: CJS 201

CJS 223 Client Growth/Development in Corrections 3(3-0)
An examination of the psychological, social, and environmental causes of criminal behavior in juveniles and adults, the impact of psychological, sexual, medical, and substance abuse problems of offenders and intervention strategies used in institutional and community settings.

CJS 224 Client Relations in Corrections 3(3-0)
An examination of the social and psychological formation of attitudes, their cultural influences, and their impact on minority perceptions. Discriminatory implications and professional responses in corrections are also considered.

CJS 231 Local Detention Academy One 3(3-0)
This course is designed to prepare Correctional Officers Training Students for employment at a local correctional (County Sheriff) facility. This course is one of three academic courses required to satisfy the Michigan Department of Corrections Local Detention Academy of 160 hours of total training. This course includes the following training academy modules and hours: Correctional Law (16 hours), Report Writing (8 hours), Interpersonal Communications (16 hours), Workplace Harassment (2 hours), Stress Management (4 hours), Cultural Diversity (4 hours).

CJS 232 Local Detention Academy Two 3(3-0)
This course is designed to prepare Correctional Officers Training Students for employment at a local correctional (County Sheriff) facility. This course is one of three academic courses required to satisfy the Michigan Department of Corrections Local Detention Academy of 160 hours of total training. This course includes the following training academy modules and hours: Booking and Intake (8 hours), Custody & Security (24 hours), Prisoner Behavior (8 hours), Suicide Awareness (8 hours), and Ethics in Corrections (2 hours).

CJS 233 Local Detention Academy Three 4(3-0)
This course is designed to prepare Correctional Officers Training Students for employment at a local correctional (County Sheriff) facility. This course is one of three academic courses required to satisfy the Michigan Department of Corrections Local Detention Academy of 160 hours of total training. This course includes the following training academy modules and hours: Defensive Tactics (40 hours), Fire Safety (12 hours), First Aid/CPR/AED (8 hours).

CJS 250 Correction Officer Training Internship 5(1-0)
The Corrections Officer Training Internship has been designed to provide the student a pragmatic work experience in a correctional institution/facility. The student intern will be required to complete a minimum of 60 hours at an operational corrections agency. The intern curriculum will include working in a variety of institutional departments and can be adjusted in accordance to the student’s needs and/or interests. Students must be recommended by one or more corrections instructors.
Prerequisites: DRF 101 and DRF 120

DRF 101 Technical Drawing 3(3-0)
Basic through advanced technical sketching will be explored in order to master the skills of visualization, special perception, and basic blueprint reading. Freehand technical sketching, geometric constructions, orthographic (multi-view) projection, isometric drawings, auxiliary views, sectional views, and dimensioning will be covered as well as basic development of thread representation and manufacturing tolerances. Laboratory assignments include producing piece part technical drawings utilizing industry standards. Students will also be briefly introduced to a CAD program to experiment with computer-aided drafting at the end of the course.

PREREQUISITE: DRF 101 and IND 101 recommended.

DRF 105 Introduction to Geometric Dimensioning & Tolerancing 2(2-0)
This course is designed to introduce the fundamentals of geometric dimensioning and tolerancing. Intermediate through advanced blueprint reading will be explored. Emphasis is placed on basic concepts of dimensioning and tolerancing a drawing with respect to the actual function or relationship of other part features.

DRF 120 Introduction to Auto CAD 3(3-0)
This course is designed to acquaint students with computer aided-drafting using AutoCAD software. System interface, creating, modifying/editing and displaying geometry, dimension styles, block insertion, scale drawings, paper space/model space usage, creating templates, and file management will be introduced to students as they create basic mechanical detail drawings and basic architectural drawings. An introduction to 3-D solid modeling will be explored at the end of the course.

DRF 201 Mechanical Detail Drafting with CAD 3(3-0)
This course will prepare the student to make working drawings of mechanical component parts and small assemblies using CAD while gaining more experience using the AutoCAD program. Emphasis will be placed on dimensioning, views, projection, and manufacturing tolerances. Additional skills will be developed in creating pictorials, depicting threads and fasteners, and creating blueprints for manufacturing. Intermediate through advanced 2-D AutoCAD commands and techniques will be developed throughout the course. Students are expected to do a complete minimum of 2 hours of individual outside of class laboratory hours work per week.

Prerequisites: DRF 101 and DRF 120

DRF 210 Introduction to Solidworks 3(3-0)
Students will have a thorough introduction to 3-D parametric solid modeling design using SolidWorks. Students will explore introductory through advanced SolidWorks commands and techniques including part model creation, assembly model creation, part drawing documents, and other modeling features and commands related to 3-D solid modeling. Students will model mechanical component parts to apply commands and principles.

PREREQUISITE: DRF 210

DRF 211 Advanced Solidworks Applications 3(3-0)
Students will have a thorough introduction to advanced SolidWorks applications that include: sheet metal design, surface modeling, mold design, weldments, small structural design, and other topics. Students will model mechanical component parts and individual product designs to apply commands and principles.

Prerequisites: DRF 210

DRF 220 Introduction to Soft Plan 3(3-0)
Students will have a thorough introduction to 2D and 3D architectural design using Soft Plan. This class is available for students to design residential and light commercial buildings. Students will acquire the ability to design floor plans, floor systems and ceiling plans, roof plans, elevation drawings, cross section drawings, site plans, and framing diagrams.

DRF 250 Computer Assisted Design Internship 2(2-0)
DRF/CAD Internship is a capstone course planned for the last semester of the Associate in Applied Science: Computer Aided Drafting & Design Technology Degree. The students will be employed in an approved internship position selected by the college coordinator and faculty. Documentation by the employer will be required.

Prerequisites: MID 150, DRF 101, DRF 105, DRF 120, DRF 201, DRF 210, DRF 211, IND 101, IND 113, and IND 116, all with a minimum grade of B OR successful completion of a competency exam (83% or better).

DRF 280 CAD Program & Software Certification 3(3-0)
This course will cover the necessary skills and techniques that are included on nationally recognized CAD software certification exams. This course is designed as a CAD program capstone course to help students prepare for program assessment exam(s) as well as CAD software certification exam(s). This course will allow student to revisit the fundamental objectives in computer aided drafting & design technology such as geometric constructions, object properties & organizational, orthographic & multi-view drawings, dimensioning and notes, auxiliary views, section views, and assembly drawings & block review. Student will also be reintroduced to solid modeling topics that include part modeling, advanced part modeling, assembly modeling, and advanced modeling theory and analysis.
Prerequisite: DRF 101, DRF 105, DRF 120, DRF 201, DRF 210 and DRF 211 all with a minimum grade of B or successful completion of a competency exam (83% or better).

**DRF 295 - 299 Special Topics 1(3-0)**

These courses are designed to investigate various topics in Drafting and Design Technology that are not included in current courses. Topics will be announced. These courses are offered based on demand.

**CTG 210 CT Patient Care and Safety 1(1-0)**
This course prepares the CT student to safely practice within the hospital or ambulatory care setting. Students will discuss the importance of patient assessment. Emphasis will be placed on radiation safety and contrast administration.
Prerequisite: Admission to the CT Program.

**CTG 215 Principles of CT 1(1-0)**
This course provides a historical overview of the CT profession. Students will explore the principles of digital imaging. Emphasis will be placed on the physical principles of computed tomography, data acquisition and data processing.
Prerequisite: Admission to the CT Program.

**CTG 220 CT Instrumentation 2(3-0)**
This course provides an introduction of the CT operating system. Students will review radiation physics and discuss factors affecting dose in CT. Emphasis will be placed on artifact recognition, artifact reduction, and image quality.
Prerequisite: Admission to the CT Program.

**CTG 230 CT Procedures and Pathophysiology I 3(3-0)**
This is the first in a series of two courses that will provide the student with considerations related to routine imaging techniques of the central nervous system (CNS) and musculoskeletal system (MSK). Students will explore common pathologies found on CT images. Emphasis will be placed on contrast usage, imaging processes, and positioning considerations.
Prerequisite: Admission to the CT Program.

**CTG 231 Ct Procedures and Pathophysiology II 3(3-0)**
This is the final procedures and pathophysiology course in a series of two that will provide the student with considerations related to special imaging procedures. Students will explore common pathologies found on CT images. Emphasis will be placed on contrast usage, imaging processes, and positioning considerations.
Prerequisites: Admission to the CT Program.

**CTG 240 CT Clinical Practice I 3(3-0)**
This is the first in a series of two clinical courses that provides the necessary supervised clinical education needed for the CT student to competently apply basic protocols, recognize when to appropriately alter the standard protocol and recognize equipment and patient considerations that affect image quality. Emphasis will be placed on patient safety and comfort while professional values, attitudes, and behaviors are upheld.
Prerequisite: Admission to the CTG Program.

**CTG 241 CT Clinical Practice II 3(3-0)**
This is the final clinical course in a series of two that provides the necessary supervised clinical education needed for the CT student to competently apply basic protocols, recognize when to appropriately alter the standard protocol, and recognize equipment and patient considerations that affect image quality. Emphasis will be placed on patient safety and comfort while professional values, attitudes, and behaviors are upheld.
Prerequisite: admission to the CT Program.

**ECE 101 Intro. to Early Childhood Education 4(4-0)**
This course is designed to assist the student to understand the role and personal characteristics of the child care provider or teacher, to become familiar with early childhood settings, developmental milestones and development theories. The course consists of lecture and some hands-on activities to guide children's learning. This course introduces the student to the Child Development Association (CDA) national credential.

**ECE 112 Infancy 4(5-0)**
This course explores prenatal development, modern child birth practices, and their effect on the family, normal human development of infants from birth through 2.5 years, and the practical issues confronting professionals who work with children of this age group and their families. Students will choose licensed lab sites where infants and toddlers are in attendance. Thirty lab hours are required. This class satisfies Department of Human Services (DHS) requirements for infant/toddler lead teachers.
Corequisite: ECE 101

**ECE 113 Early Childhood 4(5-0)**
This course explores the principles of growth and development of children ages 3-8 years, as well as strategies for teaching this age group, observation techniques, working with the child in the context of their family and addressing family diversity. 30 lab hours are required in a licensed Department of Human Services (DHS) program or school setting with children ages 3-8 years in attendance.
Prerequisite: ECE 101 and ECE 112 or permission of Coordinator
ECE 114 Interacting With Children, Parent/Adult 4(5-0)
This course will explore the theoretical perspective for interaction, and the influence of significant adults, especially parents, in the lives of children birth through age eight. The student will observe child-adult interactions in natural settings. 30 hours of lab time are required in observing young children in the community. Diversity and parenting styles will be studied.
Prerequisites: ECE 101 and ECE 112

ECE 150 Preparation for Child Development Associate Credential (CDA) 2(2-0)
This course is designed to prepare the student for assessment by the Council for Early Childhood Professional Recognition to earn the Child Development Associate Credential. The student will be guided through the preparation of a resource file, distribution of parent questionnaires, writing of statements of competence, and review of typical test questions and interview practice sessions.
Prerequisites: Be employed in a licensed or registered child care setting, or be a regular volunteer in such a program able to accumulate 480 hours working with young children. (This requirement for the CDA must be accomplished in the three years prior to sending an application for assessment.) Have accumulated 120 clock hours of early childhood training, either through high school vocational classes, college courses, or in-service training with an early childhood agency. Be able to document these training hours by transcript, certificates or other acceptable means.

ECE 160 Pediatric CPR/First Aid - Pathogens 0.5(0.5-5)
The HeartSaver First Aid and CPR AED course is designed to prepare students to provide first aid, cardiopulmonary resuscitation (CPR), and automated external defibrillator (AED) use in a safe, timely, and effective manner. The course goals involve cognitive and psychomotor objectives. Includes bloodborne pathogens (BBP) training. This course (BBP) is designed to meet the regulatory requirements (OSHA 1910.1030) for child care workers in all 50 U.S. states.
Prerequisites: None

ECE 201 Guidance and Implementation of Programs 3(4-0)
This course is designed to provide students with a variety of opportunities to learn developmentally appropriate methods and theories of guidance, both direct and indirect, in working with young children. In addition, the course will examine all aspects of the early childhood setting, including physical arrangement, curriculum development, positive atmosphere, and age and interest groupings. Evaluation techniques to assess child and program progress will be examined. 30 labs hours in a Department of Human Services (DHS) licensed setting are required. ENG 111 is highly recommended prior to enrolling in this course.
Prerequisites: ECE 113 and ECE 114

ECE 202 Creative Development of the Child 3(4-0)
This course will focus on curriculum development in an early childhood setting. Students will learn how children become creative thinkers, and how to encourage creativity in young children in multiple content areas. Activities will be developed for implementation in a lab setting. 30-hour lab placement is required. ENG 111 is highly recommended prior to enrolling in this course.
Prerequisites: ECE 113 and ECE 114

ECE 206 Parent, School, & Community 3(4-0)
This course will explore the important relationship between the early childhood program and the families involved, as well as taking a look at the school and community resources available to programs and families. Some lab hours will be spent visiting service agencies and attending early childhood events, including a home visit, a parent-teacher meeting, and a parent-teacher conference. ENG 111 is highly recommended prior to enrolling in this course.
Prerequisites: ECE 113 and ECE 114

ECE 207 Early Childhood Education Practicum 4(7-0)
This course takes the student into selected early childhood settings where they will prepare activities and give care to children using theories and techniques learned and observed in prerequisite courses. It includes time with peers and instructor to evaluate and discuss the field experience.
Prerequisites: ECE 201, ECE 202, ECE 206 and ENG 111

ECE 208 Early Childhood Administration 4(4-0)
This course is designed to give students knowledge of the "administration" of early childhood programs. Topics include: record keeping, the hiring and training of staff, child advocacy, using community resources, budgeting, food service, collaboration, public relations, marketing and fund raising. This course satisfies licensing requirements for Program Directors under the Department of Human Services (DHS).
Prerequisites: ECE 201, 202, 206, and ENG 111 or permission of ECE Coordinator

(ECO) ECONOMICS

ECO 110 Economics and Society 3(3-0)
An examination of the development of economic thought and institutions with emphasis on the application of this knowledge to the understanding of today's world.

ECO 201 Principles of Economics (Macroeconomics) 3(3-0)
Examines major subdivisions of the American economy. Some of the specific areas studied are national income theory, money and banking, the business cycle, economic growth, and international trade.
ECO 202 Principles of Economics (Microeconomics) 3(3-0)
This course is designed to introduce the basic terms and concepts of economics. The economic behavior of specific economic units such as households and business firms is examined. Some principle topics are postulates of economics, supply and demand concepts, and price determination by various types of businesses.

ECO 290 - 299 Selected Topics 3(3-0)
These courses are designed to investigate various topics in Economics that are not included in current courses. Topics will be announced.

(EDU) EDUCATION

EDU 107 Introduction to Teaching 3(3-0)
Introduction to teaching as a career. Survey of student behavior and effective teacher responsibilities preparatory to guided observation and participation in K-12 settings.

EDU 290 Technology in Education 3(3-0)
Students will learn to operate various technology-based equipment; select and assess instructional media materials, courseware, and software; and integrate technology and media into K-12 instruction.
Prerequisite: Students should have basic computer and keyboarding skills. Students must have taken EDU 107.

(ENG) ENGLISH

ENG 097 College Reading I 2(2-0)
ENG 097 is designed to develop the strategies, skills, and attitudes necessary for reading college-level texts. Based on reading placement score, completion of the English self-placement quiz, and discussion with an academic advisor, students may enroll in ENG 097 in conjunction with ENG 110 Introduction to Academic Writing, or another course with college-level reading. Students will learn and practice a variety of reading strategies they can use to better understand why they read. In addition to strategic reading, emphasis will be on integrating critical thinking with reading, reading comprehension, reading flexibility, and expanding vocabulary. With an instructor facilitating, students will develop existing reading skills in an interactive, collaborative setting.
Prerequisites: None
Corequisite: ENG 110 or a class with college level reading.

ENG 098 College Reading II 1(1-0)
ENG 098 is designed to develop the strategies, skills, and attitudes necessary for reading college-level texts. Based on reading placement score, completion of the English self-placement quiz, and discussion with an academic advisor, students may enroll in ENG 098 in conjunction with ENG 110 Introduction to Academic Writing, ENG 111 Freshman Composition, or another course with college-level reading. Students will learn and practice a variety of reading strategies they can use to better understand why they read. In addition to strategic reading, emphasis will be on integrating critical thinking with reading, reading comprehension, reading flexibility, and expanding vocabulary. With an instructor facilitating, students will develop existing reading skills in an interactive, collaborative setting.
Prerequisites: None
Corequisite: ENG 110, ENG 111, or a class with college level reading.

ENG 104 Reading and Writing for College 4(4-0)
ENG 104 is a four credit course that combines instruction in reading and writing and is designed for students who have had little to no preparation for reading and writing at the college level. The kinds of strategies and skills students will practice in ENG 104 should prepare them for the kinds of reading and writing they will do at the college level. Note: Students who assess at a low reading level must begin the composition sequence with ENG 104.
Prerequisite: None

ENG 110 Academic Writing 3(3-0)
This course is meant to serve as a companion course to ENG 111, and will utilize the same goals and outcomes. However, ENG 110 is designed to provide incoming students a more gradual and thorough introduction to the textual practices required in college (such as evidence, critical analysis, considering rival points of view, or synthesizing a new position). This course will focus on how to read, annotate, and respond to academic texts, and will also introduce students to writing strategies designed to make them successful academic writers.
Prerequisite: ENG.104 with a minimum grade of C, or placement into ENG.110.

ENG 111 Freshman English Composition 3(3-0)
This course prepares a student for academic writing in the college setting, and concentrates on analyzing and discussing written sources. Emphasis is on writing that shows insight into published discussions of an issue and understanding of the contexts of academic debate (rather than on informational reports or personal expression essays). In addition, research and revision are treated as integral parts of the process of writing an academically acceptable essay. By the end of the course, a student must show ‘competency’ in an academic portfolio of selected essays.
Prerequisite: ENG.110 with a minimum grade of C; or placement into ENG.111.

ENG 111B Portfolio Tutorial 0(1-0)
ENG 111B is a one-hour tutorial for students who failed their English 111 portfolio but who otherwise would have been eligible for a grade of C or better in ENG 111. The tutorial will
combine individual conferences, group work, and classroom activities to prepare the student to resubmit their portfolio. Prerequisites: A copy of the 111 portfolio and instructor referral are required.

**ENG 112 Introduction to Literature 3(3-0)**
This course introduces students to a variety of literature and enhances students' competency in critical reading and writing. The course will include introductions to genres of literature and critical theories of reading and responding to literature. Students should have completed ENG 111 and have basic writing skills.
Prerequisite: ENG 111.

**ENG 201 English Literature I 3(3-0)**
A survey of works of major authors of English literature from Beowulf through the 18th century.
Prerequisite: ENG 111.

**ENG 202 English Literature II 3(3-0)**
A continuation of ENG 201 from the late 18th century poets through the writers of the present.
Prerequisite: ENG 111.

**ENG 205 American Literature to 1870 3(3-0)**
A study of the nation's authors and literature from colonial times through the Civil War period.
Prerequisite: ENG 111.

**ENG 206 American Literature From 1870 3(3-0)**
A continuation of ENG 205 from the Reconstruction through mid-20th century works.
Prerequisite: ENG 111.

**ENG 213 Contemporary Literature 3(3-0)**
Readings in the novel, short story, essay, autobiography, biography, poetry, and drama of the 20th and 21st centuries. From semester to semester, this course will focus on one of the following genres: Science Fiction, Postcolonial, Postmodern, Queer, African American, Women's, Native American, or Graphic Fiction Literature.
Prerequisite: ENG 111 and either SPE 101 or 257

**ENG 222 Expository Writing & Research 3(3-0)**
This course is designed to further develop skills in all phases of the nonfiction writing process with special emphasis on academic writing situations, argumentation, and library research. Writing is approached both as a way of learning and as a form of social behavior that varies according to conventions of aim, audience, and form. Instruction and assignments are partially individualized according to students' educational goals.
Prerequisite: ENG 111 with a minimum grade of C

**ENG 225 Creative Writing 3(3-0)**
Introduction to the essentials of narration, characterization, and other components of creative writing. Students are required to submit original poetry and/or one-act plays or short stories.

**ENG 281 Children's Literature 3(3-0)**
A review of the rich and diverse field of literature for children from preschool to adolescence. Recommended for students in the elementary teacher education curriculum.
Prerequisite: ENG 111

**ENG 289 Film, Filmmaking, and Culture 3(3-0)**
In this course, film will be approached as an important sociological and cultural artifact and as both primary and secondary sources of historical information and insight. This course will also introduce the student to the techniques of this unique art form. The goal is to learn how to watch film from an analytical perspective. Students will need to pay additional fees for Netflix and iTunes rentals/subscriptions, at an approximate cost of $75.
Prerequisite: ENG 111

**ENG 290 - 299 Selected Topics 3(3-0)**
These courses are designed to investigate various topics in English that are not included in current courses. Topics will be announced.

**ESL 101 English for Non-Native Speaker 4(4-0)**
ESL 101 is a course for speakers of English as a Second Language (ESL) on using English for a variety of academic and social situations to prepare them for success as international students. It is a classroom course (i.e. traditional face-to-face) that meets for 4 contact-hours every week, with some students also required to attend weekly tutoring sessions in the Writing Center. It is intended to be flexible and student-centered in order to meet diverse language needs.
Prerequisite: This course is designed for students with lower language proficiency (equivalent to a TOEFL CBT score below 187). All students enrolled in ESL 101 must be non-native speakers of English. The instructor has discretion in determining who is a non-native speaker of English and is eligible for this course.

**ESL 103 Academic English for Non-Native Speakers 4(4-0)**
ESL 103 is a course for speakers of English as a Second Language (ESL) on reading and writing academic English intended to prepare them for the language tasks of an American postsecondary classroom. It is a classroom course (i.e. traditional face-to-face) that meets for 4 contact-hours every week.
Prerequisites: Students enrolled in ESL 103 are required to have taken and passed ESL 101 with a C or better. Students able to demonstrate a high language proficiency may be allowed to waive this prerequisite based on the instructor’s evaluation (equivalent to a TOEFL CBT score less than 213 but above 187).

ESL 290 - 299 Special Topics 3(3-0)

(FRN) FRENCH

FRN 101 Elementary French I 4(4-0)
This is an elementary course designed for students who have had little or no previous experience in French. It is designed to help students acquire foundational language skills necessary for basic communication in French. The majority of class time will focus on verbal communication, however, reading and writing will be frequently integrated, and selected cultural information will be studied.

FRN 102 Elementary French II 4(4-0)
French 102 is a continuation of French 101 and will begin with a brief review of the material covered in FRN 101. Students in French 102 will continue the study of grammar and vocabulary and will use these to communicate utilizing speaking, writing, listening, and reading skills. This course is designed to provide the basis for further study of French at the intermediate level.
Prerequisite: FRN 101 or equivalent.

(GEG) GEOGRAPHY

GEG 121 Cultures of the World 3(3-0)

(GEL) GEOLOGY

GEL 101 Physical Geology 4(3-2)
An introductory study of the processes that shape our world. Topics include minerals, rocks, volcanism, earthquakes, continental drift, erosion and deposition, the ice age, and economic significance of geology to humankind.

(GER) GERMAN

GER 101 Elementary German I 4(4-0)
This is an elementary course designed for students who have had little or no previous experience in German. It is designed to help students acquire foundational language skills necessary for basic communication in German. The majority of class time will focus on verbal communication, however, reading and writing will be frequently integrated, & selected cultural information will be studied.

GER 102 Elementary German II 4(4-0)
GER 102 is a continuation of GER 101 and will begin with a brief review of the material covered in GER 101. Students in GER 102 will continue the study of grammar and vocabulary and will use these to communicate utilizing speaking, writing, listening, and reading skills. This course is designed to provide the basis for further study of German at the intermediate level.
Prerequisite: GER 101 or equivalent.

(HED) HEALTH EDUCATION

HED 101 Introduction to the Health Professions 3(3-0)
This course provides students an opportunity to understand and navigate the college/university environment, value of learning, and student responsibilities within the healthcare professions. A survey of health professions, healthcare culture, interprofessional education, ethical and legal issues, employment opportunities, and market demands.

HED 106 Healthy Lifestyles 3(2-2)
This course focuses on individual health and wellness concepts using quantitative reasoning and is designed to assist the individual in striving for lifelong learning about healthier lifestyles.

HED 115 Stress Management 2(2-0)
This course is designed to give the student an overall knowledge and understanding of the mechanisms of stress as a concept, to provide stress management tools to increase coping, and to provide health/wellness promotion.

HED 205 CPR and First Aid 2(1-2)
This course includes CPR and first aid care. American Red Cross certification for first aid and CPR can be earned.

HED 285 Community Health 3(3-0)
This course has been designed to offer the student a comprehensive introduction to community health. Through awareness of the many health issues associated with any given community, the student will be able to critically assess the extent of and examine possible solutions.

HED 290 Special Topics 1(1-0)
These courses are designed to investigate various topics in Health Education that are not included in current courses. Topics will be announced.

(HES) HUMAN ENVIRONMENTAL STUDIES

HES 100 Human Lifespan Development 3(3-0)
This course introduces students to the study of the principles of human development from conception to death. The
course provides a focus on childhood foundations in our later development, as well as familial and societal influences on our development across the lifespan. This course is designed for students interested in early childhood development and family studies related majors and careers. Students who have taken PSY 212 or an equivalent will not also receive credit for HES 100.

(HIS) HISTORY

**HIS 101 Issues in Western Civilization I 3(3-0)**
A survey of the development of Western peoples from ancient times through 1650 A.D. Emphasis is placed upon topics relating to the intellectual, social, religious, political, and economic development of Western peoples.

**HIS 102 Issues in Western Civilization II 3(3-0)**
This is the second semester continuation of HIS 101. The course emphasizes the development of Western peoples from 1650 to the present. Principle topics examined are the political, intellectual, social, religious, and economic developments, and their impact upon world civilizations.

**HIS 211 History of the United States I 3(3-0)**
This course examines the developments from exploration of the Americas through Reconstruction. Primary topics of study are exploration of colonization and its characteristics, the American Revolution, the Constitution, democratic developments, rise of States Rights, the Civil War, and Reconstruction.

**HIS 212 History of the United States II 3(3-0)**
Continuation of HIS 211. This course covers events from the post-reconstruction period to the present. Principle areas of study are economic growth, political activities, diplomacy, and social and intellectual developments.

**HIS 223 History of Michigan 3(3-0)**
This course examines developments in Michigan from the time of earliest human habitation to the present. Major areas examined are French and British rule and rivalry, Michigan’s move to statehood, exploitation of natural resources, and political and social development of the 19th and 20th centuries.

**HIS 290 - 299 Selected Topics 3(3-0)**
Courses designed to investigate various topics in History not included in current courses. Topics will be announced.

(HRA) HEATING/REFRIGERATION/AIR CONDITIONING

**HRA 102 Refrigeration Fundamentals 3(4-0)**
As an introductory course to the field of refrigeration service, instruction is given in the handling of refrigerants, application, identification, reclaiming and refrigerant alternatives. Particular attention is paid to the principles, construction, and operation of refrigerating systems. Theory underlying refrigeration principles is covered. Laboratory experience includes cutting, soldering, swaging, and flaring of copper tubing, the evacuation and recharge of refrigeration systems, electrical troubleshooting for basic systems, the diagnosis and repair of the refrigeration system, and testing equipment typically used in the field of refrigeration service.

**HRA 104 Residential Refrigeration 3(4-0)**
This course studies residential refrigeration systems, to include domestic refrigeration and air conditioning. Included in the instruction are ice makers, defrost controls, diagnostic display panels and typical appliance system problems. Particular attention is paid to the principles, construction, and operation of these systems. Laboratory experience includes residential system electrical troubleshooting and repair, and the diagnosis and repair of the refrigeration system.
Prerequisite: HRA 102

**HRA 105 Hydronics 3(4-0)**
An introduction of the concepts involving fluid system heating devices. Topics will cover: hot water and steam heating units, terminal units, control devices, piping, and diagnosis of hydronic systems.
Prerequisite: HRA 106

**HRA 106 Heating Fundamentals 3(4-0)**
An introductory course into the fundamentals of heating systems and installation practices. Laboratory experience includes furnace installation, steel and copper piping, furnace and control wiring, and flue gas venting.

**HRA 108 Heating Systems 3(4-0)**
Residential and commercial forced air and hydronic heating systems are covered in this course. The instruction includes the fundamental operation of gas and oil burners, for both standard and high efficiency systems. In addition, system configuration and operation principles are studied for fossil fuel systems and solid fuel burners. Laboratory experiences include the trouble shooting and repair of spark ignition control systems, relay control safeties, hot surface ignition, flue dampers, and efficiency testing of heating systems.
Prerequisites: HRA 106, HRA 116

**HRA 115 Plumbing 4(4-0)**
This course covers the design, use, and application of potable and non-potable water systems as they apply to both water supply and waste problems. Students are involved with the practical applications of plumbing systems in a simulated environment like that found in the field.

**HRA 116 Fundamentals of Electricity 3(4-0)**
This course covers the principles of electrical wiring for heating, refrigeration, air conditioning and manufacturing automation.
Studies of frequency, phase, resonance and reactance, along with basic resistance, capacitance, inductance, voltage, and power which govern the fundamentals of all circuits will be explored. Laboratory work will be used to develop skill in analysis, troubleshooting of basic electronic circuitry, and use of test instruments.

**HRA 175 Solar Heating Systems 3(4-0)**
This course involves the study of various systems utilized to convert solar energy to domestic and commercial heating applications. Design characteristics, efficiency, and cost of various systems are reviewed. Students engage in the design and construction of an operational solar heating system as a part of the course requirements.

**HRA 198 EPA Refrigerant Handler Certification 1(1-0)**
This is a 4-day course specifically designed to teach students the required knowledge necessary to pass the Environmental Protection Agency’s Refrigeration Handler Certification Exam. The specific content areas are: Core. The basic law regarding CFC, HCFC, HFC and other chlorinated refrigerants, containments, disposal, and other certification requirements. Type 1: This level of certification deals with factory charged refrigeration systems containing less than 5 pounds of refrigerant. Type 2: This level of certification deals with all other high pressure refrigerant systems with 5 pound of refrigerant of more or are custom manufactured. Type 3: This level of certification deals with low pressure chiller applications. Universal Certification is granted to those who pass all certification levels; the student must pass the Core section to be awarded any certification. The Refrigerant Handler Certification textbook and exam are included. The instructor for this course is an EPA Certified Refrigerant Handler Certification Exam instructor.

**HRA 204 Light Commercial Refrigeration 3(4-0)**
This course deals with more complex refrigeration systems associated with supermarkets and restaurants. Instruction and laboratory work are geared toward the installation and service of all types of light commercial refrigeration equipment such as walk-ins, reach-ins, water chillers, air cooled condensers, and water cooled condensers with cooling towers. Some of the other topics covered include heat controls for both single and three-phase systems.
Prerequisite: HRA 102

**HRA 205 Motors and Controls 2(3-0)**
This course in electricity concerns itself with the operation of electric motor-driven systems and devices. Classroom and laboratory experiences will include testing, troubleshooting, and repair of electric motor control systems. Electric motor-driven devices applicable to many different fields are covered, such as heating and air conditioning, machine tool and other electric-driven mechanical devices. Prerequisite: HRA 116.

**HRA 215 HRA Controls 3(4-0)**
A course designed to provide theory of operation, installation, and design of programmable, electric, and pneumatic controls for heating, refrigeration, and air conditioning systems. Laboratory work includes the installation, wiring, and troubleshooting of these control systems.
Prerequisite: HRA 116

**HRA 220 Commercial Refrigeration Design 2(2-0)**
Calculations in the sizing and design of refrigeration systems are covered in this course, as well as equipment layout and bid preparation. Topics include: U values, R values, insulation types and their installation, vapor barriers, construction details, and numerous charts, graphs, formulas, and other design material.
Corequisite: HRA 204

**HRA 223 Residential HVAC Load Determination 3(3-0)**
A course designed to calculate the winter heat loss; summer heat gain, and the cost of operation for a residential heating and/or air conditioning system. Manual J methods and computer software programs are used.
Prerequisites: HRA 108.

**HRA 225 Residential HVAC Distribution 3(3-0)**
Calculations in the sizing, location, and design of forced air ducts and hydronic residential heating and air conditioning systems. Manual D methods and computer software programs are used.
Corequisite: HRA 223

**HRA 240 Advanced Commercial Refrigeration 3(4-0)**
This course deals with complex exotic refrigeration systems such as: environmental test chambers, supermarket refrigeration equipment, commercial ice-making equipment and ground source heat pump systems. Also included are various applied control systems and components. Prerequisites: HRA 104, HRA 116, HRA 204

**HRA 251 Geothermal Basics 3(3-0)**
This is the first course in the Geothermal Program. It covers an in depth look at the Basics of geothermal technologies including; system components, controls, troubleshooting, control schematics, system application and domestic hot water production.
Prerequisite: HRA 240 or MMCC Heating and Refrigeration Training Credentials or an Associate's Degree in Heating/Refrigeration from an accredited college/university, or lead faculty approval.
HRA 254 Air Source Heat Pumps 3(4-0)
This course concerns itself with the basic understanding of original air source heat pump technology in compliance with Air Conditioning Contractors of America (ACCA). Students will be introduced to system location requirements, components, flow requirements, and the installation and troubleshooting of air source heat pump systems using both theory and hands-on practical instruction.
Prerequisite: HRA 251

HRA 261 Geothermal System Design 3(3-0)
This course deals with structure BTU calculation, equipment capacity and air flow requirements to maintain the comfort conditions of the home. Methods used will follow the ACCA J and D Manuals and the Right Suite computer load calculation software. At the completion of this course the student will take the Air Distribution exam of the Industry Competency Exam (ICE).
Prerequisite: HRA 251

HRA 262 Geothermal Loop Systems 3(3-0)
This course is preparatory for HRA 263 International Ground Source Heat Pump Association (IGSHPA) Installer Certification workshop. This course will take a detailed look into the various types of underground loops used in geothermal heat transfer specifically: open loop, horizontal loops, slinky loops, pond loops, vertical well loops, and direct exchange loops. As well, the various types of fluids such as water, glycol, brine solutions, refrigerants and emerging technologies used for the exchange of heat in an underground loop will be examined. Application methods used in this course will follow existing data from American Society of Heating Refrigeration Air Conditioning Engineers (ASHRAE).
Prerequisite: HRA 251

HRA 263 Closed Loop Ground Source Pump Install 3(3-0)
This course deals with all pertinent topics related to International Ground Source Heat Pump Association (IGSHPA) Closed-Loop Geothermal Installation Certification and IGSHPAs High Density Poly-Ethylene (HDPE) Fusion Welding Exam administered by North American Technician Excellence (NATE). Students who successfully pass the examinations will be certified by those accrediting agencies (IGSHPA, NATE).
Prerequisite: HRA 251, or Associate Degree in Applied Science Heating Refrigeration Air Conditioning, or lead faculty approved significant, verifiable field experience in Heating Refrigeration Air Conditioning, or current recent field involvement in geothermal field processes including well drilling, architectural design or HVACR design for geothermal systems.

HRA 265 Geothermal Research and Development 4(2-4)
This course will put geothermal students on the cutting edge of HVAC technology as it relates to geothermal heating and cooling. Students will investigate areas of the complete geothermal system and evaluate possible system changes or potential areas of development. Using experimentation, prospective changes will be designed, constructed, installed and the system will be operated, monitored and evaluated. Potential system design changes will be enhanced and tested in actual field conditions in order to make industry-wide technical improvements.
Prerequisite: HRA 251, minimum grade of C

HRA 282 Insulating Systems 2(2-0)
A study of the various types of insulations currently being used in residential and commercial buildings. Also studied are the methods of installation of the various insulations as well as a comparative study of the costs of insulation, advantages and disadvantages of various insulations, and financing plans available for home and business. A course for anyone interested in energy conservation. This course cannot be used as a substitute for any course on the Heating, Refrigeration & Air Conditioning program.

HRA 283 Independent Study in Heat, Refrigeration & Air Conditioning 3(3-0)
This course is for those students who desire to gain supervised experience in actual on-site situations to enhance their knowledge and experience in the heating, refrigeration, and air conditioning industry.

HRA 285 HRA Internship 2(1-0)
Internship is a capstone course intended to be completed after the student has attained at least 30 credit hours of instruction including prerequisites. The students will be employed in an approved internship position selected by the college coordinator and faculty. A waiver may be allowed for the work component only with equivalent previous/present work experience as determined by the coordinator. Documentation by the employer will be required.
Prerequisite: The student must have completed at least 12 credit hours in HRA and completion of MID 150.

HRA 295 - 299 Special Topics 3(3-0)
These courses are designed to investigate various topics in Heating, Refrigeration & Air Conditioning that are not included in current courses. Topics will be announced. These courses are offered based on demand.

(HUM) HUMANITIES

HUM 101 World of Creativity I 3(3-0)
An introduction and exposure to the creative arts. Together, HUM 101 and HUM 102 are designed to give the student a basic understanding of the terminology and concepts of the visual arts, theatre, dance and music. Ideas and philosophies of specific periods are presented as a frame of reference for
An interdisciplinary study abroad course, offering students a unique insight into what is offered via traditional classroom experience. This class will study different aspects of a specific society. Students will interact directly with the idiosyncrasies of a specific culture and understand aspects such as: language, history, food, currency, religion, architecture, and ideas. The course will consist of combinations of lectures, tours, field research, cultural events, interviews, meetings with local experts, and a journal.

Prerequisites: Instructors Approval Needed
**IND 113 CNC Machining 4(4-0)**

The student will be introduced to CNC programming codes developed from using basic blueprint reading skills to convert basic blueprint measurements into basic CNC programming language. This course will familiarize the student in learning G and M codes, translating basic print drawings into CNC programming codes, become familiar with general CNC principles and its functions and introducing them to CNC machines and basic CNC programming skills. Student will also be introduced to MasterCam CNC graphic software. This course is a pre-requisite to IND 116 Intermediate CNC Programming. 

Prerequisite/Co-Requisite: IND 101 (can be taken prior to IND 113 or concurrent with IND 113).

**IND 116 CNC Programming 4(4-0)**

This is a one semester program that is focused on the the operations of CNC equipment along with the integration of Mastercam technology. Students will be working with a HAAS Machining Center along with a Hurco knee mill.

Prerequisites: IND 101, IND 113, grade of C or better in MAT 105 or MAT 170 or equivalent

**IND 121 Manufacturing Processes 2(2-0)**

A survey of the processes used to manufacture parts in quantity, this course is focused upon foundry, forming, stamping, metal finishing and joining technologies. Tours of manufacturing facilities augment classroom instruction and develop understanding of the scope of manufacturing enterprise in the local economy.

**IND 140 Metallurgy and Industrial Materials 3(3-0)**

An applied course covering the physical and mechanical properties, classification systems and heat treatment procedures for common ferrous and non-ferrous metals. Lab experiences include quench and temper, carburizing, tensile and hardness testing.

**IND 200 Industrial Topics 3(3-0)**

This course is designed to cover topics of an industrial nature having to do with, but not limited to, material processing, manufacturing, material handling, material shaping, and tool design. Persons employed in related industry and students in the Machine Tool, Drafting, Welding and related programs gain meaningful insights into current technology. This is not a regularly scheduled course, but is offered when there is sufficient interest.

**IND 211 Advanced Machine Shop Practices 4(6-0)**

Jig and fixture design and construction, process planning concepts, and standards for assembly hardware are the basis for instruction. The ability to perform complex machining tasks permitting the assembly of mating parts with a focus on setup and tooling for production is developed.

Prerequisite: IND 102

**IND 212 Tool, Die & Mold Manufacturing 4(6-0)**

A course devoted to the study of practices, designs, processes and materials used by toolmakers in the machine trades. Toolmakers are those qualified machinists who build dies, molds, cutting tools, jigs, fixtures, gauges and test instruments which are the basis for production manufacturing.

Prerequisite: IND 211

**IND 215 Statistical Quality Control 2(2-0)**

This course gives the student an understanding of quality control in industry, how it is achieved, how to use statistics to measure its probability of occurrence, methods of measurement, and means of control in the production process.

**IND 250 Industrial Safety 3(3-0)**

This course is designed to acquaint supervisory personnel with the requirements of OSHA and MIOSHA for the maintenance of safety provisions and accident prevention. Emphasis is placed on discussion and development of accident prevention plus plans to eliminate real and potential safety hazards.

**IND 270 Principles of Robotics 3(3-0)**

This course covers the construction, accuracy, speed, application, and programming necessary for robotic tools found in industry. The method of selecting the proper robotic tool for a job is covered along with the selection of the proper gripper required for the job. The principles of hydraulic and electrical systems are included so students have a better understanding of how robotic tools move.

**IND 280 CNC Applications I 3(3-4)**

This course develops CNC programming skills, improves competencies in CNC machine operation, and provides opportunities for students to utilize computer assisted programming skills in actual machining situations. Students design and create a postprocessor program for a lathe and for a milling machine.

Prerequisite: IND 171

**IND 285 Co-Op 3(1-0)**

Co-op is a capstone course planned for the last semester of the Associate in Applied Science: Machine Tool Technology Degree. The students will be employed in an approved co-op position selected by the college coordinator and will also attend a weekly one hour classroom lecture/discussion. A waiver may be allowed for the co-op experience by presenting evidence of current and appropriate employment to the co-op coordinator.

Prerequisite: The student must have approval of the co-op coordinator to be placed in a co-op situation.

Corequisite: IND 212
(JPN) JAPANESE

JPN 101 Elementary Japanese I 4(4-0)
This is an introductory course in Japanese language, designed for students with little or no previous knowledge of Japanese. This course introduces the basic structure and vocabulary of modern Japanese, stressing the use of Japanese orthography (the writing system) from the very outset, so the subsequent adjustment to reading ordinary Japanese literature is minimal. Emphasis will be on vocabulary and oral training for conversation with reasonable ease, with an introduction to readings and writing. Familiarity with the socio-cultural context in which the modern Japanese language is used will also be stressed.

JPN 102 Elementary Japanese II 4(4-0)
Students in Japanese 102 will continue to learn the basic language skills covered in 101 with increased emphasis on vocabulary, informal language and quick, natural-sounding speech.
Prerequisites: JPN 101 or previous study of Japanese with instructor approval

(MAT) MATHEMATICS

MAT 060 Math Study Skills 1(1-0)
This course will emphasize study skills important for success in mathematics courses. Topics to be covered include note taking, homework issues, how to study math, test taking, how to use the textbook, and anxiety. It is strongly recommended that students take another MAT course in the same semester they take MAT 060. Credit/no credit only.

MAT 101 Basic Mathematics 3(3-0)
An introductory mathematics course with a focus on applications of arithmetic, including percents (increase/decrease, compound interest, investments, inflation/deflation), proportions (unit prices, revenue/cost/profit, medicine doses, comparisons, unit conversions), and geometry (perimeter/circumference, area, surface area, volume).

MAT 102 Algebraic Concepts 3(3-0)
Algebraic Concepts is a three credit class designed for the student with little or no previous algebraic background. It will acquaint the student with basic algebraic concepts as well as prepare them to take MAT 104. Also it gives the student the foundation to be successful in the mathematics required in other Mid Michigan Community College programs.

MAT 104 Basic Algebra 3(3-0)
This course covers the fundamentals of Algebra. Topics include: evaluating and simplifying expressions, solving first degree equations and inequalities, applications of first degree equations, graphing two variable equations, solving simultaneous systems of linear equations, polynomial operations and the introduction of functions.
Prerequisite: Grade of C or better in MAT 101 or MAT 102 or equivalent.

MAT 105 Intermediate Algebra 3(3-0)
Intermediate Algebra is a course designed for students with prior knowledge of basic algebra. This course will focus primarily on rational, quadratic, and radical expressions, equations, and functions.
Prerequisite: Minimum grade of C in MAT 104 or placement into MAT 105.

MAT 107 College Algebra 3(3-0)
Students in College Algebra will study real and complex numbers, linear functions, quadratic functions, zeros of functions, interpreting graphs, linear and quadratic inequalities, polynomial and rational functions, exponential and logarithmic functions, the algebra of functions, and conic sections.
Prerequisite: Successful completion of MAT 105 or equivalent.

MAT 114 Mathematical Reasoning 3(3-0)
Provides a course for students majoring in fields that do not have a specific mathematics requirement. Emphasizes practical applications of mathematics, problem solving, and the communication of mathematics. Topics include Financial Mathematics, Growth Models, Probability and Statistics, and Voting and Apportionment. Topics determined by the instructor will also be in the course. These topics may include graph theory, game theory, set theory, logic, linear algebra, economics, or other approved topics.
Prerequisite: MAT 104 with a C or better or placement into MAT 105.

MAT 118 Mathematics for Elementary Teachers I 3(3-0)
This course provides part of the mathematical background necessary for elementary teachers. Topics include sets, numerations systems, elementary number theory, natural numbers, integers, and rational numbers.
Prerequisite: Grade of C or better in MAT 105 or equivalent.

MAT 124 Precalculus 5(5-0)
Preparation for students who desire to study calculus. Topics include properties of real numbers, inequalities, data analysis, modeling, functions and relations, logarithms and exponential functions, circular and trigonometric functions.
Prerequisite: Grade of C or better in MAT 105 or MAT 107 or equivalent

MAT 126 Calculus I 5(5-0)
The first of a series of four courses for mathematics, engineering, and science students. Topics include limits, continuity, differentiation of algebraic and trigonometric
functions, applications of derivatives, fundamental integration, exponential and logarithmic functions.

Prerequisite: Grade of C or better in MAT 124 or equivalent

MAT 170 Technical Mathematics II 3(3-0)

This applied mathematics course is for students who already have satisfactory arithmetic skills, or who have completed an introductory course, such as MAT 101. The object of the course is to apply geometry and trigonometry to realistic machine tool problems. Many problems will require the student to work with engineering drawings or blueprints. Topics covered will include signed numbers, the Cartesian coordinate system, solving equations, circles and arcs, geometric constructions, and trigonometry. Students are expected to have a scientific calculator. Calculator operations will be covered in class.

Prerequisite: MAT 101 or equivalent

MAT 212 Introduction to Probability and Statistics 3(3-0)

Selected topics from probability, variable, data collection and summarization, distribution, hypothesis testing, regression, and correlation. An interest course for use in teaching, science, business, biology, sociology, psychology, economics and more.

Prerequisite: Grade C or better in MAT 104 or equivalent

MAT 217 Business Calculus 4(4-0)

Fundamental calculus operations applied to business and financial situations. Topics will include limits, derivatives and their applications, curve sketching and optimization, exponential and logarithmic functions, integration and applications, an introduction to functions of several variables, and the mathematics of finance. Students are required to have a graphing calculator. The Texas Instruments TI-83+ calculator is strongly recommended.

Prerequisites: MAT 107 with a grade of C or better

MAT 218 Mathematics for Elementary Teachers II 3(3-0)

Continuation of MAT 118 to include decimals, percent, ratio-proportion, geometry, probability, statistics, introduction to algebra and microcomputer use.

Prerequisite: Grade of C or better in MAT 118

MAT 225 Calculus II 4(4-0)

Topics include indeterminate forms, methods and applications of integration, improper integrals, parametric equations, polar coordinates, and infinite series.

Prerequisite: Grade of C or better in MAT 126 or equivalent

MAT 226 Calculus III 4(4-0)

Topics covered include: functions of n-variables, partial differentiation, multiple integration, solid analytic geometry, 3-space vectors, and Greens Theorem.

Prerequisite: Grade of C or better in MAT 225 or equivalent

MAT 230 Introduction to Linear Algebra 3(3-0)

This course acquaints students with the theory and elementary application of vectors and matrices. Topics include linear systems, matrices, vectors, vector spaces, and linear transformations.

Prerequisite: Grade C or better in MAT 126 or equivalent

MAT 290 - 299 Selected Topics 3(3-0)

Courses designed to investigate various topics in Mathematics not included in current courses. Topics will be announced.

(MID) PERSONAL DEVELOPMENT

MID 101 Strategies for Success in College 2(2-0)

This course is designed for first time and returning college students. To develop the attitudes and behaviors of successful college students, the course covers topics such as learning styles, critical thinking, reading and comprehension strategies, as well as note taking, test taking, and time management strategies. Students will discuss and practice various techniques. By becoming familiar with the various styles of learning, studying, reading, and test taking, students will identify the ways that work best for them.

MID 102 Career Exploration and Development 1(1-0)

Career Exploration and Development is an 8 week, one credit course for new and returning students. This course will focus on assisting students in identifying their career goals through self assessment of interests, aptitudes, and world of work preferences. Students will also learn resume and cover letter development, interview techniques, and job search strategies.

Corequisite: This course must be taken in conjunction with at least one other course, not PED.

MID 103 Human Relations 3(3-0)

This is an applied social science course. Focus will be on theory and research from the social sciences (primarily psychology) that apply to an individuals personal and professional development. This course is not intended solely for psychology or other social science majors, but for any student who is interested in improving psychological well-being.

MID 150 Career Readiness 1(1-0)

This course will prepare students on how to conduct themselves in a professional work setting and gain an understanding of workplace expectations. Topics include: career planning and exploration, career research, resume development, communication etiquette, and interview skills.
**(MUS) MUSIC**

**MUS 131 Music for Elementary Teachers 3(3-0)**
This course will prepare elementary teachers for uses and applications of music in the elementary classroom.

**MUS 275 Music Appreciation 3(3-0)**
This course will promote general musical understanding through active listening.

**(NUR) NURSING**

**NUR 101 Foundations in Nursing 8.5(2.5-0.5)**
This course is an introduction to the role of the professional nurse utilizing a systematic approach to foundational nursing concepts. The nursing process is utilized to develop critical thinking to safely meet geriatric clients’ basic needs. There is a clinical component to this course.
Prerequisite: Admission to the Nursing Program
Co-requisites: NUR 150 and NUR 151

**NUR 102 Adult Health I 7(13-0)**
This course is an introduction to common acute and chronic conditions in adult clients. The course includes assessment and identification of clinical problems, prioritization, client-centered and evidence-based nursing interventions, outcome development and evaluation, and recognition of the usual course of medical treatments. There is a clinical component to this course.
Prerequisites: NUR 101, NUR 150, and NUR 151
Corequisite: NUR 103

**NUR 103 Mental Health Nursing 3(2-3)**
This course focuses on mental health concepts, understanding the dynamics of human behavior and therapeutic communication with an emphasis on safe nursing care for the client. There is a clinical component to this course.
Prerequisites: NUR 101, NUR 150, NUR 151
Corequisites: NUR 102

**NUR 133 Transition for Advanced Standing 3(2.5-1)**
This course is designed to assist in the role transition from practicing LPN to ADN student. This course is specifically targeted for the non-MMCC LPN and MMCC LPN who graduated more than 2 years prior to readmission. It expands on the concepts of communication techniques, nursing process, assessment, nutrition, safety, evidence-based practice, and skills competency. Students must successfully complete this course to enter the Nursing program.

**NUR 150 Pharmacology in Nursing 3(3-0)**
This course is an introduction to the nurse’s role in safe administration of a variety of medications and their preparation including dosage calculations.
Prerequisite: Admission to the Nursing Program
Corequisites: NUR 101 and NUR 151

**NUR 151 Assessment in Nursing 0.5(1-0)**
This course is an introduction to the basic adult physical assessment and recognition of expected versus abnormal findings.
Prerequisite: Admission to the Nursing Program
Corequisites: NUR 101 and NUR 150

**NUR 202 Adult Health II 6(4-6)**
This course focuses on care of adult clients with increasingly complex acute and chronic conditions. The course includes the development of professional nursing skills such as; delegation, collaboration, and prioritization. There is a clinical component to this course.
Prerequisites: NUR 101, NUR 150, NUR 151, NUR 102, NUR 103
Corequisite: NUR 202

**NUR 203 Family Centered Nursing 5(3-6)**
This hybrid course focuses on concepts of family and child development from conception through adolescence. The course includes participation in client-centered care of maternal/child and pediatric clients through the application of nursing judgment. There is a clinical component to this course.
Prerequisites: NUR 101, NUR 150, NUR 151, NUR 102, NUR 103
Corequisite: NUR 202

**NUR 204 Adult Health III 6(4-6)**
This course focuses on delivering client-centered care to adult clients with emergent and multi-system problems. The course includes an introduction to critical care and emergency care nursing while applying nursing judgment, evidence based practice, and collaboration with the interprofessional healthcare team. There is a clinical component to this course.
Prerequisites: NUR 101, NUR 150, NUR 151, NUR 102, NUR 103, NUR 202, NUR 203
Corequisite: NUR 227

**NUR 227 Leadership 2(2-0)**
This course provides the basics of leadership and management techniques to enable students to provide care to groups of patients. Focus is on the use of the nursing process in planning care for groups. Legal and ethical problems in nursing are explored. Includes concept of role transition from student to graduate and stress management techniques. Students must be enrolled in a clinical concurrently with this class.
Prerequisite: Completion of Semester 1 of Level III of the Program
**NUR 227 Leadership in Nursing 2(2-0)**
This hybrid course supports role transition and professional advocacy as a registered nurse as a leader/manager of care.
Prerequisites: NUR 101, NUR 150, NUR 151, NUR 102, NUR 103, NUR 202, NUR 203
Corequisites: NUR 204

**NUR 229 Capstone 3(3-9)**
This course facilitates the safe role transition from student nurse to graduate nurse while applying theory to practice in a supervised clinical setting.
Prerequisites: NUR 101, NUR 150, NUR 151, NUR 102, NUR 103, NUR 202, NUR 203, NUR 204, NUR 227

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**ORT (ORIENTATION)**

**ORT 100 College Navigation Course 0(0-0)**
This course is designed to provide skills to students to navigate the college systems. In addition, students will explore their career options and develop an Education Plan, learn to manage their financial aid, and develop success strategies.

**ORT 101 TRIO Success Strategies I 0(0-0)**
This course is designed to provide students enrolled in the MMCC TRIO SSS grant cohort with skills to navigate the college systems and develop academic and personal strategies to empower them to successfully reach their academic goals. Some of the topics covered include Study Tips, Test Taking Strategies, Academic Support Services, Time Management, and Financial Aid. Restricted to students enrolled in the TRIO program.
Prerequisites: Must be enrolled as member of MMCC TRIO SSS cohort.

**ORT 201 TRIO Success Strategies II 0(0-0)**
This course is a continuation of ORT 101 and is designed to provide students enrolled in the MMCC TRIO SSS grant cohort with skills to navigate the college systems and develop academic and personal strategies to empower them to successfully reach their academic goals. Some of the topics covered include Learning Styles, Career Services, Financial Literacy, and Goal Setting. Restricted to students enrolled in the TRIO program.
Prerequisites: Must be enrolled as member of MMCC TRIO SSS cohort.

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**PED (PHYSICAL EDUCATION)**

**PED 103 Body Mechanics/Aerobics 1(1-0)**
Exercise through choreographed dancing. The course includes an understanding of aerobic exercise, the proper approach to physical fitness, and its effect on tension and better health.

**PED 110 Beginning Body Dynamics 1(1-0)**
This course combines elements of cardiovascular and strength training, martial arts movement, pilates, yoga, and dance into an integrated exercise routine. Through verbal instruction, students will perform movements designed to increase basic physical fitness. Knowledge of life-long fitness practices will also be gained.

**PED 119 Beginning Golf 1(1-0)**
This course is designed to introduce students to the basic principles of golf. In addition to learning and practicing the golf swing, rules and etiquette of the game are discussed. Students may use their own equipment or rent from the golf facility where the class is held.

**PED 124 Beginning Skiing 1(1-0)**
This course is designed to introduce students to basic downhill skiing on an established ski resort hill. Students may use their own equipment or rent from the ski resort.

**PED 132 Beginning Karate 1(1-0)**
This course has been designed to help the participating student understand the art of karate, not only as a method of self-defense but as a 2,000 year old art developed to better-coordinate the body and mind. Emphasis is placed on physical fitness, history of the art, self-discipline, and self-defense. Involved are body-movement principles, a progressive exercise program, and other desirable health and mental aspects of the art of karate.

**PED 145 Beginning Snowboarding 1(1-0)**
This is a course in basic snowboarding. The course includes instruction in the proper use of equipment, safety considerations, and the basic skills required to snowboard.

**PED 210 Intermediate Body Dynamics 1(1-0)**
This is the second in a series of courses combine elements of cardiovascular and strength training, martial arts movement, pilates, yoga, and dance into an integrated exercise routine. Through verbal instruction, students will perform movements designed to increase basic physical fitness. Knowledge of life-long fitness practices will also be gained.
Prerequisite: PED 110

**PED 232 Intermediate Karate 1(1-0)**
The purpose of this course is to provide students already knowledgeable in the rudiments of the art with the opportunity to gain more substantial expertise in specific aspects of the art. These include self-defense, sport fighting, philosophy, and history.

**PED 252 Advanced Karate 1(1-0)**
This course is designed for the student who has completed PED 232 or who can perform the basic techniques of Moo Duk Kwan Tang Soo Do. Upon completion of the course the
student should be prepared to earn an eighth gup purple belt under requirements set forth by the Karate Institute. Emphasis is on forms, hand and foot techniques, one-step sparring, and class sparring.

**PED 255 Physical Training 3(3-0)**
This course is designed to help students pass the M.C.O.L.E.S. physical training requirements. The objective is to teach the student to become physically and mentally fit to become a police officer.

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**PHL 201 Introductory Philosophy 3(3-0)**
A problem approach organized to introduce the student to some of the thinkers, systems, and problems of philosophy facing humanity from ancient times to the present.

**PHL 210 Social Philosophy: Ideals & Realities 3(3-0)**
This course is an inquiry aimed at discovering which questions are the right ones to ask when evaluating a social system or when designing it. It covers several major social philosophies, as reflected in utopian and dystopian writings, and focuses on issues such as human nature, freedom, rights, and obligations, and the relationship between individual and community.

**PHL 220 Ethical Issues 3(3-0)**
A study of ethical principles, reasoning and practice as it occurs in such areas as business, law, medicine, ecology, and government. A brief review of the historical development of ethical theory together with case studies will be the primary focus of the course. The main objective is to provide students with the intellectual tools for recognizing and analyzing such ethical issues as confront members of our society.

**PHL 250 Chinese Philosophies 3(3-0)**
This course surveys three branches of traditional Chinese philosophy (Confucianism, Daoism, and Buddhism) and includes comparisons with Western thought. Readings include translations of founding thinkers plus later commentaries. Emphasis will be on the relevance of these philosophies for thinking about how we should live.

Prerequisites: One philosophy course recommended, but not required.

**PHL 290 - 299 Selected Topics 3(3-0)**
These courses are designed to investigate various topics in Philosophy that are not included in current courses. Topics will be announced.

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(PHT) PHARMACY TECHNOLOGY

**PHT 104 Orientation to Pharmacy/Community Pharmacy Practice 4(3-2)**
This course presents an orientation to the work of pharmacy technicians and the context in which technicians work is performed in a community pharmacy setting. The concept of direct patient care and the technicians' general role in delivery with particular emphasis on the complementary roles of pharmacists and technicians is presented and how they relate in a community pharmacy setting.

Corequisites: ALH 100, PHT 105, PHT 106

**PHT 105 Pharmacy Law 2(2-0)**
This course presents information on the influence that medication laws, standards, and regulations have on pharmacy practice. Federal and State regulations that govern medicine use and standards of practice are presented. Laws, regulations and standards which govern the preparation of non-compounded, cytotoxic and other hazardous medication products are emphasized.

Corequisites: ALH 100, PHT 104, PHT 106

**PHT 106 Pharmaceutical Calculations 3(3-0)**
This course will present applications of pharmaceutical dosage calculations using various systems of measurements including conversions and applications of equations. This course also introduces basic business math skills, such as calculating inventory, purchasing, and profit margins.

Corequisites: ALH 100, PHT 104, PHT 105

**PHT 113 Orientation to Institutional Pharmacy Practice 4(3-2)**
This course presents information on how to assist the pharmacist in an institutional pharmacy. Students will learn about the basic structure and functioning of an intuitional pharmacy. Students will gain hands-on experience in sterile and non-sterile compound product preparation. Emphasis will be on aseptic technique and parenteral product preparation where students develop skills in the manipulation of parenteral drug products.

Prerequisites: PHT 104, PHT 105, PHT 106
Corequisite: PHT 114, SPE 101 or SPE 257

**PHT 114 Pharmacology for Pharmacy Technicians 4(3.5-1)**
This course presents information on the use and side effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the body systems. Students learn the brand and generic names, standard pronunciations, dosage forms, and routes of administration for medications.

Prerequisites: PHT 104, PHT 105, PHT 106, BIO 120
Corequisite: PHT 113, SPE 101 or SPE 257
PHT 115 Pharmacy Technician Clinical 7(7-0)
Skills and knowledge acquired during the first two semesters of the Pharmacy Technician program are applied in community and institutional pharmacy settings. All internship experience is under the supervision of a registered pharmacist. 160 hours will be completed in a community pharmacy setting and 160 hours will be completed in an institutional pharmacy setting for a total of 320 hours of internship experience.
Prerequisites: PHT 113, PHT 114, SPE101 or SPE 257

(PHY) PHYSICS

PHY 101 Introductory Physics (non-Lab) 3(3-0)
A general non-mathematical physics presentation stressing a conceptual as opposed to laboratory approach. Some topics of discussion are mechanics, sound, heat, electricity, light, nuclear concepts, and everyday encounter of principles governing these topics. (Not recommended for students majoring in science.)

PHY 103 Applied Physics 4(3-2)
This course is designed for students enrolled in technical education programs. The purpose of the course is to provide an understanding of physical principles and their application to industry. The course content includes a study of precision measurements; properties of solids, liquids, and gases; force and motion; work energy and power; vectors; analysis of basic machines; temperatures and heat.
Corequisite: MAT 104 or MAT 170

PHY 105 Introductory College Physics I 5(4-2)
This course focuses on the study of motion, forces, energy, sound, wave motion and heat. Students should have had or be currently taking a class in trigonometry.
Corequisite: MAT 124 or equivalent

PHY 106 Introductory College Physics II 5(4-2)
Continuation of PHY 105. Topics studied include optics, electricity and magnetism, atomic and nuclear theory and relativity.
Prerequisite: PHY 105

PHY 211 University Physics I 5(4-2)
This course covers mechanics, sound, and heat. It is a mathematical treatment of problems of force, motion, and energy designed for pre-engineering students and physics or mathematics majors. Not open to students with credit in PHY 105 or PHY 106.
Prerequisite: MAT 124 with a C or better
Corequisite: MAT 126 recommended

PHY 212 General Physics II 5(4-2)
Electricity, magnetism, light, relativity, and nuclear structure are discussed. Designed for pre-engineering students and physics majors. Not open to students with credit in PHY 105 or PHY 106.
Prerequisite: PHY 211

PHYSICS

PHY 212 University Physics II 5(4-2)
Electricity, magnetism, light, relativity, and nuclear structure are discussed. Designed for pre-engineering students and physics majors. Not open to students with credit in PHY 105 or PHY 106.
Prerequisite: PHY 211

(PLT) PLASTICS TECHNOLOGY

PLT 101 Survey of the Plastics Industry 2(2-0)
This course is intended to provide the student a foundation of the plastics industry; including the history of people, materials and processes that helped shape the modern plastics industry. Various careers in the plastics industry and related industries, such as drafting, design, machining, electronics, maintenance, computer information systems, network and etc. will also be explored.

PLT 110 Plastics and Polymer Materials 3(3-0)
In this course students will be introduced to polymers, plastics, additives, fillers and reinforcements commonly used in modern plastics manufacturing. Students will study the physical and mechanical characteristics of thermoset and thermoplastic materials, define the different materials classifications and types and review criteria used for material selection and cost estimating as related to design, fit and function of finished goods.

PLT 111 Plastics and Polymer Materials Testing 3(2-2)
In this course students will be introduced to the ASTM (American Standards and Testing Methods) and ISO (International Standards Organization) testing procedures commonly used in the plastics manufacturing industry. Students will conduct physical and mechanical tests in accordance with the different test standards, including all pre and post analysis and report generating.
Corequisite: PLT.110

PLT 120 Plastics Manufacturing Processes I 4(2-4)
In this course student will study Injection Molding, Blow Molding and the Extrusion processes. This course will cover material and design differences for each application, processing difference and will include a concise review of pre and post molding activities for each process.
Prerequisite: PLT.101

PLT 130 Thermoforming I 2(1-2)
This course is an introduction to the plastics thermoforming process. Topics include health and safety of the thermoforming process, common materials, types and methods of
thermoforming processes (i.e.: thick and thin gage forming), machinery and the economics of the thermoforming industry as a whole.

**PLT 135 Thermoforming II 2(1-2)**
This course is an advanced continuation of PLT 130: Thermoforming I. Advanced processing, trimming and forming techniques will be explored throughout the courses, including but not limited to, tooling, part/product development, processes troubleshooting, and equipment troubleshooting and machinery maintenance.
Prerequisite: PLT 130 or permission of instructor

**PLT 180 Plastics Internship I 3(3-0)**
This course is intended to provide students an on-site work experience in a plastics manufacturing company. Under cooperative supervision by the College and the work site Supervisor, students will further develop skills and gain training in the plastics engineering technology career field.
Prerequisite: 15 PLT Credits and permission of instructor

**PLT 180 Plastics Internship 2(2-0)**
This course is intended to provide students an on-site work experience in a plastics manufacturing company. Under cooperative supervision by the College and the work site Supervisor, students will further develop skills and gain training in the plastics engineering technology career field.
Prerequisite: 15 PLT Credits and permission of instructor and completion of MID 150.

**PLT 215 Secondary Operations in Plastics Manufacturing 3(2-2)**
This course provides the student with basic knowledge of secondary processes associated with plastic product manufacturing. Common processes used in assembly, decorating, trimming, joining and packaging of plastic parts will be covered. Emphasis will be placed on the complete manufacturing process.
Prerequisite: PLT 101, PLT 110, PLT 120 & PLT 130 (If students from other disciplines such as DRT and IND, Permission of Instructor is required)

**PLT 225 Production Planning and Control 3(3-0)**
This course will introduce students to the basic fundamentals of production planning, scheduling and controlling, such as the development and application of software solutions, inventory management, and lean production concepts. Topics include: forecasting, sales and operations, scheduling, materials requirements, capacity management, production control, "partnering" activities, and system integration. The materials presented in the course are applicable in many different disciplines and manufacturing facilities beyond Plastics that involve the planning, scheduling and controlling of production.
Prerequisite: PLT 101 or Permission of Instructor

**PLT 235 Manufacturing Quality Systems 3(3-0)**
This course is designed to prepare students with modern concepts of quality control and assurance techniques as a body of managerial, technical, behavioral and economic knowledge. This course will introduce Lean, TQM, Kaizen, ISO and other waste reduction and quality operating systems to improve efficiency and effectiveness in manufacturing operations.
Prerequisite: PLT 101 or Permission of Instructor

**PLT 250 Plastics Product Development 4(3-2)**
This course is designed to provide students with the basic elements of plastic part design, mold design, tool design and how it differs from the concepts and principles of metal forming, fabrication, and etc. This course will use a variety of software, hardware and graphical design methods as well as traditional print reading, part identification and problem-based case studies. Special emphasis will be given to understanding the role of the following critical elements in plastics product and tool design, plastics material selections, mold fill analysis, finite element analysis, components and functions.
Prerequisite: PLT 101, PLT 110, PLT 120 & PLT 130 (If students from other disciplines such as DRT and IND, Permission of Instructor is required)

**POL) POLITICAL SCIENCE**

**POL 201 Introduction to American Government 3(3-0)**
The emphasis of this course is the structure and function of our national government, understanding the processes of decision-making, and assessing the political importance and role of the individual citizen. The student is also introduced to some political theory as applicable to the American experience.

**POL 290 - 299 Selected Topics 3(3-0)**
These courses are designed to investigate various topics in Political Science that are not included in current courses. Topics will be announced.

**(PSC) PHYSICAL SCIENCE**

**PSC 101 Introductory Astronomy 4(3-2)**
An introduction to astronomy for students who desire a basic understanding of the solar system and the universe. Topics include: historical astronomy, exploration of space, stellar evolution, solar system, galaxies, and the universe. Laboratory work includes individual student use of a telescope.

**PSC 102 Introductory Physical Science 4(3-2)**
A one-semester course for science majors or non-science majors. The basic principles and concepts of physical science, including the structure of matter and the magnitude and character of energy and physical forces, will be analyzed and applied towards a scientific understanding of the Earth and
other planetary bodies. Laboratory experiments will illustrate the role of observation, prediction and modeling in the physical sciences. Appropriate for students considering further study in chemistry, physics, geology, meteorology or astronomy. (Note, PSC 102 does not earn transferable science credit for any of the above listed scientific disciplines.)

Prerequisite: MAT 104 (Previously or concurrently) or one year of High School Algebra

(PSY) PSYCHOLOGY

PSY 101 Introduction to General Psychology 3(3-0)
This class introduces students to the scientific discipline of psychology. This course will include a comprehensive coverage of basic concepts and principles, terminology, important trends in psychological research, and the application of this research. Emphasis will be placed on contemporary perspectives of psychology, including biological, learning, cognitive, sociocultural, psychodynamic, and humanistic perspectives in understanding normal and abnormal behavior and mental processes.

PSY 103 Human Relations 3(3-0)
This is an applied social science course. Focus will be on theory and research from the social sciences (primarily psychology) that apply to an individual’s personal and professional development. This course is not intended solely for psychology or other social science majors, but for any student who is interested in improving psychological well-being.

PSY 205 Abnormal Psychology 3(3-0)
This course introduces students to abnormal psychology issues, including the criteria, nature, development, classification and causes of mental disorders. Perspectives from each of the major contemporary perspectives in psychology will be included. In addition, major theories, significant research, and methods of treatment associated with each of these approaches are presented.
Prerequisite: PSY 101.

PSY 212 Developmental Psychology 3(3-0)
This course introduces students to the description and explanation of changes in an individual’s behavior that are a result of maturation and experiences that fall within the life span concept; e.g. behavior-genetics, critical periods, learning cognition, and abnormal development. In addition, this course provides the student with an introduction into methodological research. (Students who have taken HES 100 or an equivalent will not also receive credit for PSY 212.)
Prerequisite: PSY 101.

PSY 220 Introduction to Psychological Testing 3(3-0)
This course is designed to introduce the student to the basic principles of psychological testing. The course will cover the history of psychological testing, assessment in a variety of areas including intelligence testing, personality assessment, neurological assessment, and vocational assessment, and issues relating to test development and review.
Prerequisite: PSY 101.

PSY 240 Theories of Personality 3(3-0)
This course presents issues in the measurement & research of personality. Historical & contemporary theories and theorists from each of the major domains of psychology will be critically examined regarding each of the domains’ emphasis on development and assessment of personality. Application of course material will be emphasized.
Prerequisite: PSY 101

PSY 250 Clinical Interviewing and Counseling 3(3-0)
This course is an introduction to theories of counseling as well as the techniques and processes of client and counselor communication. Students explore attitudes, values, and motivation for counseling. Emphasis is placed on the role of the counselor in various agency capacities as well as the development of empathetic and listening skills.
Prerequisite: PSY 101 or permission of the Instructor

PSY 281 Behavior Modification 3(3-0)
This course is an introduction into a survey of developments in behavior alteration. Specifically, emphasis is on behavior modification techniques in the areas of motivation, elimination of undesirable behaviors, an increase of desirable behaviors, and the promotion of academic and social participation in education and other environments.
Prerequisite: PSY 101

PSY 283 Forensic Psychology 3(3-0)
This course introduces students to the nature, development, and application of Forensic Psychology. Students will examine the field of Forensic Psychology and the many applications it has within the legal system and our society.
Prerequisite: PSY.101 Recommended: PSY.205

PSY 285 Research Methods 3(3-0)
This course provides an introduction to research methods in the social sciences. Research designs, data collection methods, basic statistical procedures, and ethical issues in research will be included. An APA-style research proposal will be completed.
Prerequisite: PSY 101, MAT 212

PSY 289 - 299 Selected Topics 3(3-0)
These courses are designed to investigate various topics in Psychology that are not included in current courses. Topics will be announced.
PTA 101 Orientation to Physical Therapy 1(1-0)
This introductory course provides an overview of the profession of physical therapy and focuses upon the role of the physical therapist assistant. Ethical and legal standards, cultural competence, professional behaviors, and standards of practice are emphasized. Communication skills are presented to better serve diverse patients/clients in the healthcare environment.

PTA 105 Modalities I 1(1-0)
This course includes instruction in the principles, indications, contraindications, precautions and techniques of biophysical agents, manual therapy and patient positioning. Basic documentation is introduced.
Prerequisite: Admission into the Program
Corequisite: PTA 106, PTA 110, PTA 111, PTA 115, PTA 116

PTA 106 Modalities I Lab 2(0-6)
This lab is coordinated with the lectures presented in Modalities I. Students gain hands on experience with biophysical agents, manual therapy, vital signs and patient positioning. Basic documentation skills are practiced.
Prerequisite: Admission into the Program
Corequisites: PTA 105, 106, 110, 111, 115 & 116

PTA 110 Therapeutic Exercise 1(1-0)
Basic exercise theory and implementation are presented. Fitness concepts of flexibility, strength, endurance, coordination and relaxation are emphasized. Additionally, patient mobility with transfers and progressing to wheelchairs and assistive devices are introduced. The importance of patient and personal safety through proper posture, body mechanics and monitoring are emphasized.
Prerequisite: Admission into the Program
Corequisites: 105, 106, 110, 111, 115 & 116

PTA 111 Therapeutic Exercise Lab 2(0-6)
This lab is coordinated with the lectures presented in Therapeutic Exercise. Students practice basic therapeutic exercise and fitness techniques. Students implement flexibility, strength, endurance, relaxation, and coordination programs. Students will also practice patient mobility with transfer techniques, wheelchairs, and assistive devices. Posture assessment and proper body mechanics are emphasized.
Prerequisite: Admission into the Program
Corequisites: PTA 105, 106, 110, 111, 115 & 116

PTA 115 Clinical Kinesiology 1.5(1.5-0)
This course provides an in depth review of functional human anatomy with an emphasis on the neuro-musculoskeletal system. Students will develop an understanding of normal and abnormal movement patterns and gait. A thorough understanding of kinesiology is essential to the Physical Therapist Assistant in understanding pathologies and injuries and providing appropriate and effective treatment for their patients.
Prerequisites: Admission into the Program
Corequisites: PTA 105, 106, 110, 111 & 115

PTA 116 Clinical Kinesiology Lab 1(0-3)
This lab is coordinated with the lectures presented in Clinical Kinesiology and provides practical observation, palpation and identification skills of basic anatomical landmarks, especially bones, joints and muscles. Normal movement patterns, functional activity analysis, and gait characteristics are included.
Prerequisite: Admission into the Program
Corequisites: PTA 105,106, 110, 111 & 115

PTA 125 Measurement Techniques 1(1-0)
Students are presented with the assessment techniques most commonly used in physical therapy. Treatment plans are based upon the objective findings of this data collection. Techniques of goniometry, muscle testing, sensory assessments, gait/posture analysis and balance assessment are presented.
Prerequisites: PTA 105, 106, 110, 111, 115, & 116
Corequisites: PTA 126, 130, 131, & 140

PTA 126 Measurement Techniques Lab 2(0-6)
This lab is coordinated with lectures presented in Measurement Techniques and allows for hands on practice. Students participate in guided practice with the assessment techniques of goniometry, muscle testing, sensory assessments, gait/ posture analysis and balance assessments.
Prerequisites: PTA 105, 106, 110, 111, 115 & 116
Corequisites: PTA 125, 130, 131, & 140

PTA 130 Advanced Therapeutic Exercise 2(2-0)
This course presents the principles and guidelines for treating musculoskeletal conditions. Normal and abnormal tissue healing of musculoskeletal structures is emphasized as well as appropriate physical therapy interventions at different stages of healing. Other therapeutic exercises are presented for vascular disorders and improper posture.
Prerequisites: PTA 105, 106, 110, 111, 115 & 116
Corequisites: PTA 125, 126, 131, & 140

PTA 131 Advanced Therapeutic Exercise Lab 2(0-6)
This lab is coordinated with the lectures presented in Advanced Therapeutic Exercise. Students participate in guided practice in providing physical therapy interventions for musculoskeletal conditions, as well as additional exercises for improper posture. Previous course information about basic therapeutic exercise and fitness are integrated into lab sessions.
Prerequisites: PAT 101, 105, 106, 110, 111, 115, & 116
Corequisites: PTA 125, 126, 130, & 140

**PTA 140 Clinic I 4(0.5-10)**
The full time clinical education experience offers students opportunities to observe, assist with and implement treatment techniques which have been introduced in prior lecture and practiced in lab courses. The students are under direct supervision of a clinical instructor (physical therapist or physical therapist assistant) who facilitates learning. Students will be assigned to hospitals, outpatient clinics, nursing and rehabilitation centers, or home care settings for four weeks.
Prerequisites: PTA.105, 106, 110, 111, 115, 116
Corequisites: PTA 125, 126, 130, & 131

**PTA 205 Modalities II 2(2-0)**
The basic concepts, terminology and physiology of electrotherapeutic agents are introduced. The course guides the student in understanding treatment parameters and the safe management of equipment for pain control, edema/swelling reduction, muscle spasm relief and strengthening.
Prerequisites: PTA 125, 126, 130, 131 & 140
Corequisites: PTA 206, 207, & 208

**PTA 206 Modalities II Lab 1.5(0-4.5)**
This lab is coordinated with the lectures presented in Modalities II. Students participate in guided practice of safe and effective delivery of electrotherapeutic agents. The students use a variety of modalities for decreasing pain, increasing strength, reducing edema/swelling, and muscle spasm relief. Documentation skills are reinforced.
Prerequisites: PTA 125, 126, 130, 131 & 140
Corequisites: PTA 205, 207 & 208

**PTA 207 Rehabilitation Techniques 2(2-0)**
Rehabilitation techniques are introduced for neurological and pathological conditions. Normal growth and development, as well as orthotics, prosthetics and airway clearance techniques are covered.
Prerequisites: PTA 125,126, 130, 131 & 140
Corequisites: PTA 205, 206 & 208

**PTA 208 Rehabilitation Techniques Lab 2(0-6)**
This lab is coordinated with the lectures presented in Rehabilitation Techniques. Rehabilitation treatments are practiced for common neurological and pathological conditions. Students also gain experience with orthotics, prosthetics, adaptive equipment, airway clearance techniques and normal growth and development.
Prerequisites: PTA 125, 126, 130, 131 & 140
Corequisites: PTA 205, 206 & 207

**PTA 210 Clinical Forum 3(3-0)**
This seminar course offers networking with classmates and instructors to solve clinical problems, improve communication skills, and reinforce professional behavior. Emphasis is on evidence based clinical decision making, ethical practice, planning for future employment, and professional growth.
Prerequisites: PTA 205, 206, 207 & 208
Corequisites: PTA 210

**PTA 240 Clinic II 12(0-15)**
The full time clinical education experience offers students opportunities to implement and develop entry level competence in treatment techniques which have been introduced in prior lecture and practiced in lab courses. The students are under direct supervision of a clinical instructor (physical therapist or physical therapist assistant) who facilitates learning. Students will be assigned to hospitals, outpatient clinics, nursing and rehabilitation centers, or home care settings for 14 weeks.
Prerequisites: PTA 205, 206, 207, 208
Corequisites: PTA 210

**RAD (RAD) RADIOGRAPHY**

**RAD 100 Introduction to Radiologic Technology 3(2-2)**
This course is an introduction to the radiologic technology profession. Also presented are an introduction to the principles of radiographic exposure, digital imaging, and image processing. Practice in the fundamentals of equipment operation and image processing in the Campus x-ray lab provides the basis for developing initial psychomotor skills necessary to function as a radiologic technologist.
Prerequisite: Admission to the Program
Corequisite: RAD 110

**RAD 110 Radiation Physics 2(2-0)**
Radiation Physics (RAD.110) is a course designed to prepare students with a basic understanding of the principles of Radiation Physics, X-Ray Production and Interactions. Areas of concentration include Units of Measurement, Forces, Motion, Electrostatics, Magnetism, Basic Electrical Circuits, and Atomic and Nuclear Physics. Emphasis will be placed on the study of ionizing radiation which is especially important to the Radiographer. Two hours per week will be devoted to lecture and discussion and the remaining two hours will be spent in the laboratory conducting experiments associated with the lecture topics.
Prerequisite: Admission to the Radiography Program
Corequisite: RAD 100
**RAD 113 Radiation Biology 1(1-0)**
This course provides a study of the application of radiation and its effects. Areas of concentration are on the response and the biological effects of ionizing radiation on cells and tissues.
Corequisites: RAD 100 and RAD 110

**RAD 115 Principles of Radiographic Exposure 3(2-2)**
This course contains a study of the prime factors in radiographic techniques determination, the geometric and photographic basis of radiographic image formation, and how these relate to radiographic quality. Methods of technical conversions for adjusting radiographic technique to maintain radiographic quality are studied. An overview of the different systems of radiographic techniques is presented and students learn how to formulate a radiographic technique system. The basic principles of digital imaging are presented. Lab exercises augment the instruction.
Prerequisites: RAD 100 and RAD 110
Corequisites: RAD 130

**RAD 130 Radiographic Procedures I 4(2.5-3)**
An introduction to radiographic positioning fundamentals, terminology, and procedures. The study of the fundamentals of patient care is integrated with study of the basic radiographic procedures of the thorax, abdomen, upper and lower extremities, pelvic girdle, spinal column, cranium, facial bones, and sinuses. Digital imaging basics are studied as well. Practice of the basic skills required in these procedures will be done in the campus x-ray labs. A cumulative final will be given the last week of classes.
Prerequisites: RAD 100 and RAD 110
Corequisite: RAD 115

**RAD 175 Radiographic Procedures II 3(2-2)**
A continuation of Radiographic Positioning I Fundamentals, terminology, and procedures. The study of the fundamentals of patient care is integrated with study of the basic radiographic procedures of the upper gastrointestinal system, lower gastrointestinal system, gall bladder and biliary ducts, urinary system, mammary gland, pediatric radiography, arthrography, and myelography. Practice of the basic skills required in these procedures will take place in the campus x-ray lab. A cumulative final will be given the last week of classes.
Prerequisites: RAD 115 and RAD 130
Corequisites: RAD 180

**RAD 180 Clinical Education I 6(18-0)**
The first phase of clinical practicum in the hospital environment. The students review the hospital organization and operation, become familiar with hospital policies and procedures and are introduced to and integrated into the Radiology Department operations. Opportunity to develop and perfect the initial skills needed to function as a radiologic technologist is scheduled, and the basic radiographic procedures are practiced and assessed. Student film conferences are conducted and pertinent clinical issues are discussed. This course will meet for 19 weeks. Prerequisite: Successful completion of all first-year requirements.
Prerequisite: RAD 115 and RAD 130
Corequisites: RAD 175

**RAD 200 Clinical Education I 8(15-0)**
The first phase of clinical practicum in the hospital environment. The students review the hospital organization and operation, become familiar with hospital policies and procedures and are introduced to and integrated into the Radiology Department operations. Opportunity to develop and perfect the initial skills needed to function as a radiologic technologist is scheduled, and the basic radiographic procedures are practiced and assessed. Student film conferences are conducted and pertinent clinical issues are discussed. This course will meet for 19 weeks.
Prerequisite: Successful completion of all first-year requirements.
Corequisites: RAD 201, RAD 215

**RAD 201 Clinical Issues in Radiography I 2(2-0)**
This course is the first in a series of courses intended to augment first-year introductory courses and complement clinical education. Topics covered are medical legal issues, medical ethics, communication in radiology, and critical thinking/problem solving in radiography. In addition, students evaluate selected radiographs taken during clinical education. A semester project integrating didactic concepts with clinical education is conducted. Review is begun for the American Registry of Radiologic Technologists examination.
Prerequisite: RAD 175
Corequisite: RAD 200

**RAD 205 Clinical Education II 7(21-0)**
The second phase of clinical practicum in the hospital environment provides the opportunity for the student radiologic technologist to develop and perfect the skills to function as a radiologic technologist. Additional radiographic procedures are practiced and assessed. Student film conferences are again conducted. This course will meet for 20 weeks.
Prerequisite: RAD 215

**RAD 211 Sectional Anatomy 1(1-0)**
Content begins with a review of gross anatomy of the entire body. Detailed study of gross anatomical structures will be conducted systematically for location, relationship to other structures and function. Gross anatomical structures are located and identified in axial (transverse), sagittal, coronal and orthogonal (oblique) planes. Illustrations and anatomy images will be compared with MR and CT images in the same imaging planes and at the same level when applicable. The characteristic appearance of each anatomical structure as it
appears on a CT, MR and ultrasound image, when applicable, will be stressed.

Prerequisites: BIO 141, BIO 142, RAD 175, RAD 180
Corequisites: RAD 201, RAD 205, RAD 214, RAD. 15, BIO 110.

RAD 213 Radiation Protection 1(1-0)
This course continues and summarizes the study of the principles of radiation protection included in previous program courses. The practical applications of radiation protection in the clinical setting are discussed. Minimizing patient exposure while maintaining image quality is emphasized, as is radiation safety for medical imaging and other medical professionals.
Prerequisites: RAD.175 and RAD.180
Corequisites: RAD.201, RAD.205, and RAD.215

RAD 215 Radiation Biology 1(1-0)
This course provides a study of the application of radiation and its effects. Areas of concentration are on the response and the biological effects of ionizing radiation on cells and tissues.
Prequisites: RAD 175 and RAD 180
Corequisites: RAD 201, RAD 205, RAD 211, RAD 213, and BIO 110

RAD 217 Radiographic Techniques II 2(2-0)
A continuation of advanced study in radiologic technology. Radiographic procedures and imaging methods used to demonstrate special anatomical areas or systems are investigated. The pathological processes that necessitate radiological investigation are introduced and correlated with their diagnostic manifestation on the imaging format utilized.
Prerequisites: RAD 200, RAD 201, RAD 215
Corequisites: RAD 220, RAD 221

RAD 221 Clinical Issues in Radiography II 2(2-0)
This course is the second in a series of courses intended to augment first year introductory courses and complement clinical education. Topics covered are critical thinking and problem solving skills in radiography and communication in medical imaging, and career planning. In addition, students evaluate selected radiographs taken during clinical education. A capstone portfolio is produced. Review for the American Registry of Radiologic Technologists examination is continued. Students are required to pass a capstone simulated registry examination.
Prerequisites: RAD 201, RAD 205, RAD 211, RAD 213, and RAD 215
Corequisites: RAD 217, RAD 230, and RAD 250

RAD 225 Clinical Education III 5()
The final phase of clinical practicum in the hospital environment designed to perfect the basic skills and develop the fundamental skills in more technically-exacting procedures. Remaining entry-level procedures are assessed, and student film conferences are conducted. This course will meet for 12 weeks.
Prerequisites: RAD 201, RAD 205, RAD 211, RAD 213, and RAD 215
Corequisites: RAD 217, RAD 230, and RAD 250

RAD 226 Clinical Issues in Radiography III 1(1-0)
This course is a third in a series designed to augment clinical education. Included in this course is a capstone component that requires successfully completing a simulated registry examination. Other topics include interviewing skills and continuing education professional requirements.
Prerequisites: RAD 220, RAD 221
Corequisite: RAD 225

RAD 227 Rad Review Series Capstone 1(1-0)
This course is part of a series to be offered on an independent study basis for students who have previously completed a Radiography Program accredited by the Joint Review Committee on Education in Radiologic Technology. Students taking this course require a refresher or remedial course of study in order to re-qualify for the American Registry of Radiologic Technologists examination. The course primarily provides a review of all basic concepts on Radiography, as contained in the primary textbook. Other topics covered are preparation for review, American Registry of Radiologic Technologists examination procedure, and test-taking skills. As a capstone feature, students are required to take two simulated registry examinations, and must pass (75%) at least one of them.
Prerequisites: RAD 101, RAD 111, RAD 116, RAD 176
Corequisite: RAD 214

RAD 230 Radiographic Quality Assurance 0.5(1-0)
The course discusses the principles of a department wide quality assurance program. The concepts, instrumentation, and testing methods used in radiology departments for quality control of the radiographic imaging system(s) are also covered.
Prerequisites: RAD 201, RAD 205, RAD 211, RAD 213, RAD 215
Corequisites: RAD 217, RAD 221, RAD 250

RAD 250 Clinical Education III 7.5(0-22.5)
The final phase of clinical practicum in the hospital environment designed to perfect the basic skills and develop the fundamental skills in more technically-exacting procedures. Remaining entry-level procedures are assessed, and student film conferences are conducted. This course will meet for 12 weeks.
Prerequisites: RAD 220, RAD 221
Corequisite: RAD 225.

(REL) RELIGION

REL 111 Introduction to Religion 3(3-0)
Major forms of world religions, religious activity, and experience studied as an essential element of human life. Dimensions of the academic study of religion covered include myth, meaning,
ritual, symbolism, traditions, religious social institutions, comparative religious study, the sacred, civil religion, religious art, and the social creation of moral ideologies.

REL 111 and SSC 111 are cross-listed. Students cannot receive credit for both courses.

REL 200 Religion, Race, Class & Discrimination 3(3-0)
An introduction for beginning students to the study of the experiences of Americans who have lived with race and class discrimination in American society. Native American, African-American, and Hispanic-American groups provide the focus for the class.

REL 225 Death & Dying 3(3-0)
Each of us must deal with a complex of personal responses to death and grief while ascribing meaning and purpose to our lives. In a rapidly changing social and cultural world, conceptualizations of death, living, and grieving often compete with traditional community relationships and meaning. Death, living, and dying will be examined using dimensions of the academic study of Religion, Social Sciences, and the humanities. Death, grieving, and images and ideas of life will be explored. Topics covered include cultural, personal, emotional, legal, philosophical, moral, medical, social, and religious conceptualizations of living and dying. Myth, meaning, visual culture, music, ritual, symbolism, traditions, religious social institutions, civil religion, and the social creation of religious moral ideologies will be examined in the course.

REL 225 and SSC 225 are cross-listed. Students cannot receive credit for both courses.

REL 250 African-American Religion 3(3-0)
An introduction for beginning students to the study of African-American Religion from African religious expression, syncretic expressions, Christianity, and Islam to contemporary religious movements.

REL 290 - 299 Special Topics 3(3-0)
These courses are designed to investigate various topics in Religion that are not included in current courses. Topics will be announced.

SCI 200 Science, Technology, & Society 3(2-2)
This course is designed to introduce students from a variety of programs to the sciences. This introduction will focus on the way science and technology impacts each person's everyday life and their particular role in the environment. Knowledge will be gained for individuals to achieve scientific literacy sufficient to understand public issues. The course will stress interaction through student presentations and student-led discussions.

SCI 290 - 299 Selected Topics 3(2-2)
These courses are designed to investigate various topics in Science that are not included in current courses. Topics will be announced.

(SCI) SCIENCE

SOC 101 Principles of Sociology 3(3-0)
This course discusses the principles governing relationships among human beings & the organization of human societies. Primary emphasis on contemporary American society with integration of classical theories of sociology.

SOC 105 Awareness of Fine Arts/Science/Society 1(1-1)
An interdisciplinary study designed to develop the student’s awareness of the interrelationships of the artistic, scientific, and technological aspects of our society and investigate their impact upon contemporary society from a variety of perspectives. Various methods of instruction may be used for this course, including independent readings or research, lecture and discussion, projects associated with a field trip, or travel of recognized educational value.

SOC 200 Contemporary Social Problems 3(3-0)
This course identifies the factors and issues in humanity’s quest of a high quality of life in a changing technological society. The nature, extent, and consequences of major social problems are examined in terms of underlying social processes as well as specific factors.

SOC 202 Social Psychology 3(3-0)
This course examines the relationship between the individual and society. Contemporary theory and research are applied to areas such as symbol interaction, self, socialization, conformity, aggression and violence, group behavior, the social construction of reality, etc. Students are also introduced to the basic methods in social psychology and their application in everyday life.

SOC 220 Sexuality and Society 3(3-0)
This course analyzes the impact of society on sex and sexuality. Emphasis is on interpersonal relationships and factual information necessary to enable students to understand better their own sexuality. Topics including sex roles, sexual interaction, sexual physiology, and public issues related to sex are discussed utilizing contemporary research and cultural definitions.

SOC 222 Juvenile Delinquency 3(3-0)
This course provides the student with a concentrated overview of theory and research in the field of juvenile delinquency. Students will review research findings on various aspects of
juvenile delinquency, of the characteristics of young offenders, and of the results of different forms of judicial and therapeutic interventions designed to prevent or control delinquent activities.

Prerequisite: SOC 101

SOC 250 The American Family 3(3-0)
This course analyzes the development of the family as a contemporary social-institution. Factors which influence the makeup, stability, and the cultural and interpersonal contributions of the modern American family are discussed.

Prerequisite: SOC 250 recommended

SOC 289 Gender Studies 3(3-0)
This course is an analysis of the impact of gender throughout the social world. The impact of gender in social institutions, cultural definitions, & interpersonal relationships will be explored. Gender inequality & its reproduction will be a focus. Emphasis will be on the relationship of gender to other aspects of social location and diversity.

Prerequisite: SOC 101 recommended

SOC 290 - 299 Current Topics in Sociology 3(3-0)
Courses designed to investigate current topics of sociological relevance not included in courses currently listed. Topics will be announced.

(SPE) SPEECH

SPE 101 Fundamentals of Communications 3(3-0)
This is a basic course in interpersonal communication and public speaking. Through observation, presentation, games, role play, valuing, and personal encounter, the student learns to encode and decode messages, verbal and nonverbal, with confidence and empathy. Skills in perception and concentration are emphasized.

SPE 105 Basic American Sign Language I 3(3-0)
This course is designed to give students a basic introduction to American Sign Language which includes signing and finger spelling, expressive and receptive, and information about deaf culture and different sign systems.

SPE 195 Intercultural Communication 3(3-0)
This course introduces the student to the field of intercultural communication, emphasizing the way in which culture influences perception of yourself and others and the manner in which it affects communication behaviors and expectations. In addition, this course provides an opportunity to explore other cultures, heighten cultural awareness and sensitivity, and develop communication skills to successfully negotiate through diverse cultural experiences. In that culture refers not only to national differences, but to differences of all types (e.g., values, gender, race, communication patterns), this course will focus on the way we can manage the differences between ourselves and others in a mutually satisfying manner.

SPE 205 Basic American Sign Language II 3(3-0)
Continuation of SPE 105. This course increases the students receptive and expressive skills while continuing to provide information and knowledge of deaf culture.

Prerequisite: SPE 105 or permission of the instructor

SPE 215 Basic American Sign Language III 3(4-0)
This course continues to increase students sign vocabulary and knowledge of the grammatical structure of American Sign Language (ASL). English and ASL idioms are explored, as well as additional uses of classifiers. Students will begin to develop skills in changing English text to ASL.

SPE 225 Basic American Sign Language IV 3(4-0)
This course will build upon previously learned American Sign Language (ASL) vocabulary, grammar, and structure. Students will continue to increase their understanding of and correct use of ASL. Special emphasis will be placed on developing skills in signing English texts in ASL.

Prerequisite: SPE 215

SPE 251 Foundations of Communication 3(3-0)
This course concerns itself with theories and research in the field of human communication. There will be three segments to this course. The first will consider preliminary issues of definitions of communication and theory and broad theoretical approaches to communication. The second will consider theories specific to elements of the communication process (such as persuasive outcomes and verbal/nonverbal behaviors). The final segment will focus on context-specific theories.

Prerequisite: 9 hours of SPE completed

SPE 253 Small Group Communication 3(3-0)
This course examines the major concepts, principles, and theories associated with human communication behavior in small groups and provides practice with effective group communication skills. This course will enable you to be better able to analyze and evaluate your own participation in groups and to engage in competent communication practices in the group context. Since both interpersonal processes and problem-solving features of groups are important determinants of the groups overall effectiveness, this course will focus on both these areas.

SPE 257 Public Speaking 3(3-0)
This course is designed to build and refine the students overall communication skills, with special emphasis given to public speaking contexts. Students will examine theories and techniques for creating public speaking and apply these principles in class activities.
**SPE 261 Interpersonal Communication 3(3-0)**

This course is designed to build and refine the students interpersonal communication skills. Special emphasis will be given to understanding how relationships form and the role of communication in initiating, maintaining, and terminating relationships. Students will examine and develop skills in interpersonal communication for both personal and professional contexts. Although the central theme of the course will remain consistent for all students, assignments and communication activities will be adapted to each students chosen professional emphasis.

**SPE 263 Professional Interviewing 3(3-0)**

This course is designed to build and refine the students overall communication skills, with special emphasis given to various professional interviewing situations (employment, counseling, etc.). Students will examine the concepts and theories relevant to interview communication practices, apply these principles to communication issues and problems encountered in interview situations, and, through continued practice, set and achieve goals essential to preparing for and conducting successful interviews. Although the central theme of the course will remain consistent for all students, assignments and communication activities will be adapted to each students chosen professional emphasis.

**SPE 264 Organizational Communication 3(3-0)**

This course is designed to introduce the student to the current theories and practices relevant to the management of communication systems in formal organizations and provide the student with a practical understanding of organizational communication.

**SPE 265 Theories of Persuasion 3(3-0)**

This course is structured to give the student an understanding of persuasion theory and how it functions within society. Specifically, this course will focus on the principles of attitude formation and change, its relationship to behavioral outcomes, and the role of communication in actuating those outcomes.

**SPE 267 Nonverbal Communication 3(3-0)**

This course is designed to increase awareness of the different concepts and theories associated with nonverbal communication and to allow the student to improve skills in this area of communication. Throughout the course, students will examine the different elements which make up the nonverbal message system and, within each area, talk about some of the current social and communication issues relevant to today's world.

**SPE 270 - 279 Special Topics in Communication 3(3-0)**

Variable topics/credit course designed to address special issues and/or employ innovative teaching techniques in the study of communication.

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**SPN 101 Elementary Spanish I 4(4-0)**

This course is designed to introduce students to basic conversational Spanish. It emphasizes essential grammar and touches on Hispanic culture since culture is an essential part in learning a new language. Student should, upon course completion, have the ability to speak, write, and understand basic Spanish conversation.

**SPN 102 Elementary Spanish II 4(4-0)**

Spanish 102 continuation of SPN 101; therefore, it will begin with a review of the material covered in Spanish 101. Students in Spanish 102 will continue the study of grammar and vocabulary and will use these to communicate utilizing speaking, writing, listening, and reading skills. The course is designed to provide the basis for further study of Spanish at an intermediate level. Students are expected to study the material outside of class and come to class prepared to participate.

Prerequisite: SPN 101 or equivalent or 1 year of high school Spanish.

**SPN 201 Intermediate Spanish I 4(4-0)**

Spanish 201 is a course designed to help students in the acquisition of language skills necessary for verbal communication, grammar, reading, and writing at the intermediate level in Spanish. Cultural themes of the Hispanic world will be discussed in order to have a better cultural understanding.

Prerequisite: SPN 102 or equivalent course, or 2 years of High School Spanish.

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**SSC 111 Introduction to Religion 3(3-0)**

Major forms of world religions, religious activity, and experience studied as an essential element of human life. Dimensions of the academic study of religion covered include myth, meaning, ritual, symbolism, traditions, religious social institutions, comparative religious study, the sacred, civil religion, religious art, and the social creation of moral ideologies.

SSC 11 and REL 111 are cross-listed. Students cannot receive credits for both courses.

**SSC 190 – 199 Special Topics 3(3-0)**

Special Topics is a course designed to present various topics in Social Science that are not included in current courses. Topics will be announced. This course is offered based on demand and does not satisfy Group III requirements for graduation.
SSC 200 The Social Sciences & Contemporary America 3(3-0)
This course will introduce each of the various social sciences and demonstrate their respective and unique perspectives on the human experience. It will also endeavor to help the student to understand the scientific method of inquiry and its advantages, as well as other ways of knowing. Finally, through a thematic approach, the student will seek to apply the various social science perspectives to illuminate understanding of his/her world.
Prerequisites: ENG 111 and either SPE 101 or SPE 257. (Minimum grade of "C" in each.)

SSC 225 Death & Dying 3(3-0)
Each of us must deal with a complex of personal responses to death and grief while ascribing meaning and purpose to our lives. In a rapidly changing social and cultural world, conceptualizations of death, living, and grieving often compete with traditional community relationships and meaning. Death, living, and dying will be examined using dimensions of the academic study of Religion, Social Sciences, and the humanities. Death, grieving, and images and ideas of life will be explored. Topics covered include cultural, personal, emotional, legal, philosophical, moral, medical, social, and religious conceptualizations of living and dying. Myth, meaning, visual culture, music, ritual, symbolism, traditions, religious social institutions, civil religion, and the social creation of religious moral ideologies will be examined in the course.
SSC 225 and REL 225 are cross-listed. Students cannot receive credit for both courses.

TAI 204 Theatre-Musical 3(3-0)
Discussion of musical theatre including all aspects of a production. A musical production is included as part of the course.

TAI 205 Children's Theatre 3(3-0)
Discussion of theatre for children including all aspects of a production. A children's theatre production is included as part of the course.

TAI 206 Theatre-Mystery 3(3-0)
Discussion of mystery as a form of theatre including all aspects of a production. A mystery production is included as part of the course.

TAI 207 Theatre - Comedy 3(3-0)
Discussion of comedy theatre including all aspects of a production. A comedy production is included as part of the course.

TAI 208 Theatre-Serious Drama 3(3-0)
Discussion of serious drama including all forms of tragedy. A serious dramatic production is included as part of the course.

TAI 275 Appreciation of the Theatre 3(3-0)
A survey of theatre history and an introduction to basic types of plays; concepts of professional and amateur; and principles of play selection, casting, and promotion are covered in this course.

TAI 277 Stagecraft and Stagelighting 4(4-0)
This course includes the basic principles of scenery construction and the theory and practice of stage lighting.

TAI 287 Costuming 3(3-0)
This course is a survey of costume history, Egyptian to the present, and includes an introduction to design and construction techniques.

(WLD) WELDING TECHNOLOGY

WLD 125 Basic Industrial Welding 6(4-4)
Fundamentals of oxy-acetylene cutting, oxy-acetylene brazing and welding, ARC welding, MIG welding, and TIG welding, and manual plasma cutting, carbon arc gouging and safety procedures are included in this course. Emphasis is placed on safe welding procedures in all positions and joint types.

WLD 126 SENSE 1A 3(4-0)
Fundamentals of oxy-acetylene cutting, oxy-acetylene brazing, ARC welding, MIG welding, TIG welding, F.C.A.W, manual plasma cutting, carbon arc gouging and safety procedures are included in this course. Emphasis is placed on safe welding procedures in Flat, Horizontal positions and a variety of joint types.

WLD 127 SENSE 1B 3(4-0)
Fundamentals of oxy-acetylene cutting, ARC welding, MIG welding, TIG welding, F.C.A.W, manual plasma cutting, carbon arc gouging and safety procedures are included in this course. Emphasis is placed on safe welding procedures in all positions, a variety of joint types and in materials Steel, Stainless Steel and Aluminum
Prerequisite: WLD 126

WLD 130 Metal Fabrication 3(4-0)
Fundamentals of metal fabrication procedures and metal layout procedures are covered in this course. Pipe layout and procedures are also covered.
Prerequisites: WLD 126 and DRF 101
Corequisite: WLD 127
WLD 150 Non-Destructive Testing I 3(3-0)
A course to familiarize the student with the theory, technique, and equipment used for magnetic particle and liquid penetrant test methods as they are applied to inspection and nondestructive testing in the metal fabrication industry for quality control.

WLD 225 Advanced Welding 8(12-0)
Multi-position welding will be emphasized. The use of arc, TIG, and MIG welding equipment and weld-testing devices are covered. Reading of welding prints and use of A.W.S. welding symbols are also included. This course prepares students to pass A.W.S. structural code welding tests on plate.
Prerequisite: WLD 127

WLD 226 Industrial Welding 8(12-0)
This course builds further proficiency in manual welding processes along with the associated welding theories. The welding processes in this course include submerged arc welding, TIG, MIG, SMAW, and pattern layout; and operation of multi-oxyacetylene electric-eye cutting torches.
Prerequisite: WLD 225

WLD 227 Advanced Industrial Welding 8(12-0)
A further study of destructive and nondestructive testing, study and operation of plasma-arc welding (PAW) and plasma-arc cutting (PAC) are included in the course. The students also become more proficient in their chosen areas of manual welding processes.
Prerequisite: WLD 226

WLD 245 Pipe Welding 3(4-0)
This course is designed to prepare students to meet the requirements of the A.W.S. D1.1-79 (American Welding Society) and A.S.M.E. Section 9 code (American Society of Mechanical Engineers) for power piping. This course includes safety in welding and cutting; pipe beveling; preparation of beveled or branch pipe; electrode selection; butt weld-vertical fixed position 2G; butt weld-horizontal fixed position 5G; and pipe layout.
Prerequisite: WLD 125 or WLD.127

WLD 246 Advanced TIG Pipe Welding 3(4-0)
This course is designed for the individual who is interested in becoming proficient in the TIG process in all welding positions for pipe welding. Students weld ferrous and nonferrous piping in horizontal and vertical fixed positions as required of A.W.S. D1.1-79 (American Welding Society), A.S.M.E. Section 9 code (American Society of Mechanical Engineers), and A.P.I. Standard 1104, 15th Edition (American Petroleum Institute).
Prerequisite: WLD 245

WLD 249 Beginning Robotics 3(4-0)
This course will enable students to set-up and teach the robot to weld parts or assemblies in an efficient manner. Students will learn the appropriate safety techniques required to operate and maintain the robot. Students will learn to write and copy various programs utilizing the World Coordinate System, and they will edit and test these programs.
Prerequisites: WLD 126 and WLD 127 with a grade of C or better

WLD 281 Special Projects - Welding I 2(2-2)
Students engage in intensive practice in a chosen welding technique or process such as MIG or TIG welding. Prerequisite: WLD 127 or equivalent experience as determined by the Instructor

WLD 282 Special Projects - Welding II 2(2-0)
Continuation of WLD 281.
Prerequisite: WLD 281
Corporate and Continuing Education

Customized Workforce Training
Mid Michigan Community College is committed to providing highly effective training solutions for business and industry throughout the Mid Michigan area. We help organizations develop a training plan and identify highly qualified practitioners with industry experience and training expertise to meet specific needs. We provide training that is available when and where it is needed.

A sample of courses:
• CAD/CAM/Product Lifecycle Management
• Construction Pre-License
• Construction Continued Competency Courses
• Information Technology
• Leadership and Supervisory Skills
• Manufacturing (Welding, CNC, etc.)
• Program and Project Management
• Quality/Lean/Six sigma
• Sales and Customer Service
• Manufacturing Skills for the Shop Floor
• Blueprint Reading
• Shop Math
• Quality Control and Problem Solving
• Precision Instruments
• Programmable Logistic Controls (PLC)
• Statistical Process Control (SPC)
• Internal Auditor 16949
• OSHA 10
• Arc Flash
• ISO 9000

Short-Term Health Care Programs
Phlebotomy (193 Hours): This 9 week program will prepare students to function as phlebotomists whose responsibilities include: venipuncture and blood draw micro-collection techniques. The procedures are performed on patients of all ages at clinics, hospital labs, outpatient care centers and nursing homes.

Certified Nurse Aide (120 Hours): This 6 week program is divided into two parts, and includes classroom activities, skill practice time in the laboratory, and supervised clinical practice at an area health care agency.

PART ONE (60 Hours): Classroom education at the Harrison or Mt. Pleasant Campus of Mid Michigan Community College.

PART TWO (60 Hours): Clinical/Lab “hands on” training at a local health care facility. The training is designed to prepare the individual to fulfill the role of direct care giver/nurse aide in a health care setting. The CNA program introduces scientific principles and skills which will optimize the client’s functional independence and support, and promote their individual rights.

Electrical Apprenticeship
Under new regulations established by Michigan’s Electrical Administrative Board, all electrical apprentices must participate in an approved electrical training program. Apprentices are required to complete 144 hours of training per year until they have attained the 576 hours required by the Electrical Apprenticeship Bureau and the Department of Labor.

Mid Michigan Community College is an approved provider of related technical instruction that will meet the education requirements of apprentices. MMCC offers online courses that meet the State’s standards.

This unique online program, offers computer based learning that may be completed anywhere at any time at your own pace.

Upon completion of online learning, on site testing at MMCC is required.

Rapid Response Programs
Rapid Response Manufacturing - Plastics: This 120 hour program was designed in conjunction with business and industry to provide an entry-level training program in the area of Advanced Manufacturing - Plastics Technology. The program consist of a series of six (6) courses designed to provide students with the basic skills, knowledge and ability for a career in plastics manufacturing and manufacturing in general. Course modules include: Manufacturing Shop Safety and Health, Intro to LEAN Manufacturing Principles, Intro to Inventory Control Systems and Warehousing, Intro to Quality Control and Quality Assurance, Intro to Plastics Manufacturing Processes and Intro to Basic Equipment Maintenance and Troubleshooting. This program uses a combination of classroom instruction and “hands-on” lab training.

Rapid Response Welding: This 120 hour program was designed in conjunction with business and industry to provide an entry-level training program in basic welding. The program consist of a series of several modules designed to provide students with the basic skills, knowledge and ability for an entry level position in any number of welding occupations. Course includes:
• Safety and Health for Welders
• Blueprint Reading and Welding Symbols
• Welding Inspection and Testing
• Thermal Cutting
• Welding Principles and Technical Terms
• 4 Welding Positions and 5 Basic Joints
• Identifying and Correcting Welding Defects
• Making a Fillet Weld

The program consists of several modules which combine classroom with hands on training in MMCC’s welding labs.
**Rapid Response CNC Operations:** This 160-hour program was designed in conjunction with business and industry to provide an entry-level training program in the area of basic CNC machining. The program consists of six (6) modules designed to provide students with the basic skills, knowledge and abilities for an entry level position in any number of machining occupations. Course modules include: Industrial Blueprint Reading, Instrumentation and Measurement, Metal Machining Basics, Precision Machining, CNC I – Theory & Operations and CNC II – Operation and Programming. The program uses a combination of classroom instruction and “hands-on” lab training.

**CDLA - Truck Driving Program:** This five-week, 240-hour course and its associated written and driving exams provide participants their CDL Class A licenses.

The objectives of the Commercial Driver License (CDL) Class A Training Program at Mid Michigan Community College are to train drivers in the theory and practical application of driving commercial vehicles. Each student will learn key functions of vehicle systems; e.g. engine, auxiliary systems, brakes, drive train coupling systems, suspension and the importance of each to safe and efficient and safe operation, Federal and State requirements, including for permits. Students will also learn proficiency development practice on range and street operations.

**Ed2Go**

From learning a new language to learning a new computer program, digital photography to grant writing, personal finance to real estate investing—MMCC offers over 300 classes online through Ed2Go. Led by experts in their fields, many of whom are widely known authors, these classes cover a variety of areas. Most classes start monthly and are six weeks long, covering 24 hours of material. Students work at their own pace and have opportunities to interact with instructors and fellow students. These are non-credit classes. Learn more at ed2go.com/midmich

**Lifelong Learning**

In an effort to meet special interests and needs of the non-academic and academic community, MMCC provides an array of continuing education classes, lectures, and special events. Courses and events falling under the following major headings – professional development and personal interest are offered each enrollment period at both campus locations.
Helping your small Michigan business start, grow and thrive

The Michigan Small Business Development Center (MI-SBDC) helps small businesses launch, grow, transition and innovate. We provide counseling, training and research for new ventures, existing small businesses and advanced technology companies.

Wherever you are in your business journey, we’re here to help!

Our services

BUSINESS PLAN DEVELOPMENT
MARKET RESEARCH
ACCESSING CAPITAL
BUSINESS WORKSHOPS
TECHNOLOGY COMMERCIALIZATION
FINANCIAL MANAGEMENT
EXPORT STRATEGY
STRATEGIC PLANNING

Let’s get started!
Request a meeting to learn more about the full range of services we offer Michigan businesses!

VISIT US ONLINE: SBDCMICHIGAN.ORG

“My MI-SBDC consultant is emotionally invested in Bon Bon Bon’s success, and that means a lot to me.”
–Alexandra Clark
Bon Bon Bon

“Allowing and encouraging us to look at business differently and more aggressively has been a factor in our growth.”
–Carla Walker-Miller
Walker-Miller Energy Services

“Without the MI-SBDC, we never would have gotten funded, and Witch’s Hat Brewing Company would still be a dream.”
–Ryan & Erin Cottongim
Witch’s Hat Brewing Co.

“The MI-SBDC helped me prepare for multiple pitch competitions and I continue to work with them as I launch my podcasting company.”
–Stacie Scherman
Flint Podcasting Company
Planning to start your dream business?
Have you recently started a business?

Partner with the Michigan SBDC’s certified small business consultants to learn everything you need to know about starting a business in Michigan.

Each year we help over 5,600 businesses get started or move to the next level through training and counseling. We offer a wide range of services:

• In-person and online training
• Business plan consultation
• Market research
• General business consulting
• Online resources, tools, and more

Let’s get started!
Request a meeting to learn more about the full range of services we offer Michigan businesses!

VISIT US ONLINE: SBDCMICHIGAN.ORG

Looking to grow your business?

The Michigan SBDC helps our client base generate almost $100 million in new sales each year.

Our business consultants can help grow your business, too! In addition to a variety of training programs, we offer no-cost, one-on-one coaching sessions with certified business consultants, all of whom have extensive experience in their areas of expertise.

We can help grow your business by:

• Identifying new market opportunities
• Improving your cash flow
• Raising capital for expansion
• Increasing the effectiveness of your team
• And more

VISIT US ONLINE: SBDCMICHIGAN.ORG
ADVANCED CREDIT

Advanced credit indicates that credit will be received without enrolling in the course provided the student demonstrates expertise as evidenced by successful completion of an equivalent high school course and/or applicable exam. A recording fee may be charged at the time of transferring the advanced credit, please contact the Office of Enrollment Services for more information on applicable fees.

ADVANCED PLACEMENT PROGRAM

College course credit will be granted to students who participate in the Advanced Placement Program (AP) and pass the Advanced Placement examinations with a score of 3 (qualified), 4 (well qualified), or 5 (extremely well qualified) in College approved AP exams. Only those AP courses approved by MMCC faculty will transfer in as MMCC credit. AP exam scores should be sent directly to the Office of Enrollment Services.

The AP exams measure the college level learning experience that takes place in a high school AP course, honors class, an intensive regular course, or an independent study. Grade comparability studies in various AP subject examinations have compared to college student’s performance in similar courses.

ARTICULATION

Articulation is a term used to describe the process that facilitates the transition of a student from one educational institution to another, or from one level of education to the next with minimum duplication of coursework. High school students successfully completing career/technical training may request such experiences be evaluated for credit. For more information please contact Office of Enrollment Services.

CREDIT BY EXAMINATION

A registered student who has had experience or background comparable to a course offered at Mid Michigan Community College may wish to receive credit for the course through the Credit by Examination procedure. The procedure should be initiated with the Library & Learning Services on the Harrison or Mt. Pleasant campus to complete the Credit by Examination permission form. It is recommended to see an advisor if the Credit by Examination process is an option for the specific program.

The student will then pay a set fee ($15.00 per credit for general education courses and $20.00 per credit for non-general education courses) to cover testing costs. The Library & Learning Services will make the necessary arrangements for the examination. It should be clearly understood that the student will receive credit upon successful completion of the exam and not a grade for the class in which the examination is taken. Students should be advised that MMCC Credit by Examination is unlikely to transfer to another college.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The College Level Examination Program (CLEP) sponsored by the College Board affords students the opportunity to demonstrate their academic proficiency in specific subjects. After completing the CLEP exam(s), students should have their scores sent directly to the Office of Enrollment Services for evaluation.

Policies concerning the use of CLEP examinations at MMCC are developed and controlled by the Office of Enrollment Services. The minimum scores for CLEP subject examinations are determined by the department authorizing credit for the subject. Credit will be awarded for German Level 2 with a score of 63, for French Level 2 with a score of 52 and for all other approved exams with a score of 50 or above. See the Office of Enrollment Services for a detailed list of CLEP subject exams accepted for credit, as well as their critical cut scores.

To be eligible for credit for CLEP scores, a student must have been granted regular admissions at MMCC and an official score report must be sent directly from the College Board. CLEP examination credit may not be used to repeat any course(s) previously taken. Grades for the CLEP examination(s), where credit is granted, will be recorded as credit (CR) on a student’s transcript. MMCC currently does not proctor the CLEP examination. See the College Board website (www.collegeboard.com) for a list of testing centers.

MILITARY TRAINING CREDIT

Veterans are eligible to receive academic credit for their military experience. To have military experience evaluated for credit, veterans should send their certified DD 214 to the American Council on Education’s recommendations for evaluating credits. In addition, MMCC will grant veterans 2 Physical Education elective credits (PED XXX). Veterans planning to transfer from MMCC should be aware that other colleges/universities may not accept the credit for military training given by MMCC.

NON-TRADITIONAL CREDIT

Students possessing education experiences or skills gained through non-traditional sources (i.e. work experience, life experience, etc.) may request such experiences be evaluated for credit. Students may obtain a Non-Traditional Credit Application in the Office of Enrollment Services. The completed Application should be returned to the Office of Enrollment Services with any and all supporting documentation for evaluation. If credit is granted, a $20 per credit hour fee will be charged at the time the non-traditional credit is recorded. Students should be aware that non-traditional credit typically does not transfer to other colleges/universities.

TRANSFER CREDIT

Mid Michigan Community College will accept transfer credit from other accredited institutions within the following guidelines:

...
An evaluation will only be done from an official transcript. An official transcript bears the appropriate signatures and seals and is sent directly to MMCC from the issuing institution. Transcripts not sent directly from an issuing institution will be considered unofficial and will not be evaluated.

Credits are transferred for courses with a minimum grade of “C” or better. Grades from transfer courses are not calculated in the Mid Michigan Community College cumulative grade point average.

Transfer credits will be shown on the student’s academic record. A minimum of one-half of the student’s credits toward a program must be taken at MMCC to be eligible to graduate from MMCC with honors.

Students who transfer to MMCC after completing a degree at an accredited institution will be given the following exemptions from MMCC’s General Education requirements:

1. From a Two-Year Institution: Students transferring to MMCC with a two-year degree from an accredited institution will be exempt from 100 Level General Education requirements with the exception of math. 200 Level requirements will be determined in the transcript evaluation process.

2. From a Four-Year Institution: Students transferring to MMCC with a four-year degree from an accredited institution will be exempt from both the 100 and 200 Level General Education requirements with the exception of math.

Normally, evaluation of transcripts takes four to six weeks after the transcript is received by the Registrar; therefore, students planning to transfer into Mid Michigan Community College should have transcripts from other institutions sent to the College well in advance of the first semester of attendance.

MMCC is committed to helping all students with academic advising needs. Any student who needs assistance or has a question is encouraged to see an academic advisor. Prior to meeting with an advisor, students will need to complete an admissions application, submit transcripts, and provide ACT/SAT scores or take the Accuplacer Placement test.

**CAREER EXPLORATION AND PLANNING**

Career planning activities are designed to assist students who are undecided about their career plans or who are considering changing career plans. Students may meet with the Career Services Coach and/or participate in career related workshops.

**PERSONAL COUNSELING**

The college does not provide personal counseling services. The College maintains a list of resources for referral to local crisis centers and mental health clinics for personal counseling needs.

**MID MENTORS**

Reach out to your Mid Mentor for assistance that is unique to your needs.

Mid Mentors are committed to providing individualized and timely reminders, encouragement and outreach during your entire experience at MMCC. As your single-point-of-contact, your mentor can assist you with everything from financial aid to registering for classes. Your mentor will provide you with answers or with resources that get you answers. You can reach them at (989) 386-6622, Ext. 544. or mentors@midmich.edu.

**DISABILITY SERVICES OFFICE**

Mid Michigan Community College is committed to making accommodations and providing services to students with documented disabilities, which interfere with the learning process. Accommodations will vary and depend on the specific disability. Services may include: readers, note-takers, interpreters, books on CD’s, adaptive equipment, assistive technology, alternative testing methods, assistance with accessibility and referrals to college and community resources.

Students must provide written verification of their disability before accommodations can be made. In addition, students must register for services and reapply each semester for continued support. To inquire about these services, please contact Disability Services Office at (989) 386-6622 ext. 181 or 636.

**VOCATIONAL EDUCATION ASSISTANCE PROGRAM (VEAP)**

The Carl D. Perkins Grant is a federal program designed to help MMCC students who are enrolled in a two year state approved occupational programs. Special population students...
must qualify under one or more of the following categories: single parent, displaced homemaker, non-traditional career choice, documented disability, limited English or economically disadvantaged.

Students who are eligible must apply for financial aid (Pell) and have an unmet need as defined by financial aid. Assistance may be in the form of: academic and career counseling, college and community agency referrals, registration assistance and financial assistance - which may include help with transportation, child care, books and tuition. Assistance is limited and interested students are required to submit an application each semester by the application deadline to be considered. Priority consideration will be given to those students who have the greatest unmet need and are closest to completing their degree. For additional information please contact the Vocational Educational Assistance Coordinator at (989) 386-6622, ext. 394.

ENROLLMENT SERVICES

REGISTRATION

Returning Students
1. Students who have at least 12 credit hours recorded on their transcript, have no current registration blocks and are in good academic standing may register in person or on MidWeb. All others must see an advisor.
2. Pay tuition in full, enroll in the NBS (Nelnet Business Solutions) Tuition Management Plan, or have sufficient Financial Aid awarded by the Tuition due date. A non-refundable enrollment fee ($50 or $25) is included in the tuition and fees.

New & First Time Students
1. Get accepted
2. RSVP online for orientation
   • At orientation, you can meet with an academic advisor and register for your classes. Visit midmich.edu/orientation to RSVP today!
3. Send us your transcripts & test scores if you haven’t yet. Visit midmich.edu/nextsteps to learn how.
4. Get your financial aid in order
   • File your FAFSA (Free Application for Federal Student Aid) online at www.fafsa.ed.gov to determine your eligibility for grants, loans, scholarships, and work-study. File soon! It takes a minimum of a few weeks to process financial aid for new students. Questions about filing for financial aid? Contact you’re your Mid Mentor.
5. Set up your MMCC email and online portal
   • It is vital that you check your MMCC email. We will begin sending you important information about your financial aid and next steps immediately. Visit portal.midmich.edu, click “Account Setup,” and follow the prompts. You will need to use your student ID number.

Guest Students
Guest students are those attending other colleges who wish to take courses at MMCC for transfer credit. Note: Financial aid is not available to guest students. Guest students should follow these easy steps for admission and registration:
1. Get accepted
2. Set up your MMCC email and online portal
   • It is vital that you check your MMCC email. We will be sending you important information immediately. Visit portal.midmich.edu, click “Account Setup,” and follow the prompts. You will need to use your student ID number.
3. Select your courses
   • You can consult with an academic advisor at your home institution or one of your friendly staff will be happy to assist you in course selection.
   • Once you’ve selected your courses, verify that you meet any prerequisites. Visit midmich.edu/guest to learn how.
4. Register
   • Visit the registration desk at either of your campus locations or register yourself online via MidWeb. A step-by-step registration guide is available at midmich.edu/guest.
5. Arrange payment
   • Remember that Guest Students are not eligible for financial aid through MMCC. The federal government will only allow you to apply for financial aid through one school per semester and that should be your home institution where you are earning the bulk of your credits. View all payment methods at midmich.edu/cashier.
6. Request your MMCC Transcript be sent to your home institution at the end of the semester.
   • It’s free and can be completed by following the steps on our website at midmich.edu/transcript.

ADDING COURSES
Students may add courses to their schedule during the schedule adjustment period by completing the Drop/Add form obtained in the Office of Enrollment Services or by utilizing the MidWeb system (if eligible to do so).

DROPPING COURSES
Students may drop courses from their schedule by completing the Drop/Add form obtained in the Office of Enrollment Services or by utilizing the MidWeb system (if eligible to do so). Refund of tuition will be based on the Tuition and Fee Refund Schedule.
Courses that are dropped after the schedule adjustment period will be assigned a grade of “W” with no grade point average penalty. Students will not be allowed to drop courses after the posted last day to drop date.

INSTITUTIONAL WITHDRAWL

MMCC can drop a student who has never attended any classes, or has quit attending classes during a semester. Institutional considerations, including reporting requirements, will guide the utilization of this policy. If a student feels they have been identified in error, they may contact the Office of Enrollment Services.

ASSESSMENT

Mid Michigan Community College uses Accuplacer as an Advising tool. Accuplacer is not an admissions test. It is an assessment that helps students identify their present strengths and helps MMCC accurately place students in appropriate courses. The assessment covers the basic areas of language usage, reading, and numerical skills.

Students must complete Placement Testing if they are seeking any MMCC degree, certificate, or training credential. The only individuals who would not have to complete Placement Testing are those who have successfully completed Mathematics and English Composition at other institutions or who have taken the ACT within the past 3 years and attained a score of 21 or higher for reading and math. Appointments are encouraged, but walk-in testing may be available.

AUDITING A COURSE

A course in which a student enrolls for no grade and no credit is regarded as an Audit. Student must pay the regular tuition and fees. Audited courses are not computed into the GPA and do not count toward graduation. A course cannot be changed from audit to credit or from credit to audit after the official schedule adjustment period is over.

REPEATING A COURSE

When a course is repeated for the purpose of improving a grade, the lower grade with its credit hours and points will be removed from the existing grade point average (GPA); the higher grade with its credit hours and honor points will be computed into the GPA. The GPA is found by dividing the total honor points earned by the GPA hours. Credit cannot be earned more than once for any given course. An equivalent course taken at another institution will not remove the MMCC equivalent from the MMCC transcript.

SAME COURSE RE-ENROLLMENT

In an effort to avoid potential same course re-enrollment abuse, the following conditions apply:

1. Regardless of grade(s) earned in a course(s) previously, a student will be allowed to re-enroll for this same course for a second time without conditions unless it is in a restricted enrollment program which requires written approval to re-enroll by the Program Director.

2. Regardless of grade(s) earned in course(s) previously, a student will be allowed to re-enroll for a course for a third time but must complete a Same Course Enrollment Form in consultation with an advisor prior to registering.

3. For a student to re-enroll in a course for a fourth time or more the student must make a request in writing and receive approval from the Executive Dean of Student and Academic Support Services plus agree, in writing, to pay the complete course cost and an additional $50 per contact hour fee.*

* The purpose for requiring this fee is to ensure the student pays the total course cost thus, freeing the local and state taxpayers of any financial contribution.

COURSE SUBSTITUTIONS

Students are expected to take the required courses prescribed on the program of study they have declared. Occasionally, however, circumstances necessitate a substitution. If this should become necessary, the student should obtain a Waiver/Substitution form from the Office of Enrollment Services. This form should be completed by the student in consultation with an academic advisor, or with a faculty member from the program that would be accepting the substituted course. A clear rationale for the substitution must be provided. This substitution must then be approved by the Instructional Dean, and by the Registrar. If any of the three disapproves the action, it will be necessary for the student to take the required course.

Substitutions are not encouraged and should be considered only under the most unusual circumstances. Students should be aware that course substitutions may not transfer to another institution. Students planning to transfer are strongly encouraged to consult with the transfer receiving institution for specific course requirements.

WITHDRAWING FROM COLLEGE

Students who withdraw totally from the College must initiate formal withdrawal procedures with the Office of Enrollment Services to avoid the posting of failing grades for all courses not completed.

Students who receive Title IV Federal Student Aid funds and withdraw totally prior to completion of 60% of a semester or session may have to repay a portion of the aid they received. Please see Return of Title IV Funds Policy.

STUDENT CREDIT HOUR LOAD

Twelve or more credit hours are considered full-time, 9-11 credit hours are considered three-quarter-time, and 6-8 credit hours are considered half-time.

The normal credit hour load for a full-time student consists of 15-17 semester credit hours. A student may not elect more than 18 semester credit hours without special permission from the Associate Dean of Student and Registrar. Students wishing to enroll in more than 20 semester credit hours must receive special permission from the Vice President of Academic Services.
Students earning 0 through 23.9 credit hours are designated as “freshmen”; students earning 24 through 62 credit hours are designated as “sophomores”; students earning 63 or more credit hours are designated as “other”.

HONORS SECTION
Students with a minimum of a 3.0 GPA may elect to register for a course in the honors section. Honors classes are intended to challenge highly motivated and academically talented students. Permission of instructor is required.

HONORS OPTION
Students may apply to take a course with an honors option. The student meets with the instructor one additional hour per week in addition to the regularly scheduled class. The student and the instructor will develop an extra project together. Such options will also be marked “Honors” on the student’s transcript. Only a minimum number of honors options will be permitted each year. Students interested in this option should contact both the individual instructor and the Dean, and must apply and be approved prior to the beginning of the semester the honors option will be taken.

INDEPENDENT STUDY COURSE WORK
A student may, at the discretion of the instructor, register for a course as an independent study. Independent study courses contain the same learning objectives and expectations as courses taught through in-class or online instructional formats. Independent study courses should only be used after all other instructional methods have been considered. All independent study coursework must be approved by the appropriate faculty member AND their Dean.

CHANGE OF PROGRAM
At the time of application, the student is required to declare a program and is given a student program guide to follow, which outlines all courses required for completion of the degree or certificate. If a student decides to change his/her program of study, the Office of Enrollment Services must be notified and a new student program guide should be used to assure that the student completes the necessary courses required on the new program.

GRADING SYSTEM

<table>
<thead>
<tr>
<th>Grade</th>
<th>Significance</th>
<th>Points Per Semester Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td></td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>Above Average</td>
<td>3.3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td></td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
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<tr>
<td>D</td>
<td>Below Average</td>
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<tr>
<td>D-</td>
<td></td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0.0</td>
</tr>
</tbody>
</table>

The Grade Point Average (GPA) is found by dividing the total honor points earned by the GPA hours. Instructors may choose whether or not to use the +/- option for their students.

INCOMPLETE GRADES
In order to qualify for an incomplete contract the student must have completed at least 75% of the course work. It is at the discretion of the instructor to grant an incomplete grade (I). Upon completion of the course requirements, said instructor will change the student’s grade from an “I” (Incomplete) to the regular letter grade earned by the student in the course. Failure of the student to comply with these requirements by the due date will result in an automatic change of the incomplete grade to a grade of “F” (Failure).

The following is the maximum timeline for completing an incomplete contract. If the incomplete is for the Fall semester, all course requirements must be completed by the end of the next Winter Semester. An incomplete for Winter semester, must be completed by the end of the next Fall semester. An incomplete for the Spring/Summer semester must be completed by the end of the next Fall semester.

CREDIT / NO CREDIT
A student may take courses on a Credit/No Credit basis subject to regulations summarized here. The option is elected (or removed) by submitting a Credit/No Credit Request on a Drop/Add form to the Office of Enrollment Services during the official schedule adjustment period for a semester. The instructor is not notified when a course is taken credit/no credit and assigns the student a letter grade. The grade is converted to credit or no credit according to the following
guidelines. The student earns credit (CR) for the course and credit toward graduation when a grade of "C" or better is assigned. No credit (NC) is recorded when the assigned grade is a "C-" or below. The course appears on the student's permanent records with the CR or NC grade, but the grade has no effect on the grade point average.

Departments designate which of their courses may be taken on a credit/no credit basis. A department may offer certain courses exclusively on a credit/no credit basis after approval by the appropriate curricular authorities and noted on MidWeb.

A maximum of 12 semester hours of credit earned under the credit/no credit option may be applied toward a degree. Courses exclusively offered on this basis are not included in the 12-hour restriction.

A student who officially elects the credit/no credit option for a course may not change the registration to a letter grade designation after the schedule adjustment period.

GRADE REPORTS

Grade reports can be obtained on MidWeb which can be accessed through Mid Michigan Community College's website at www.midmich.edu.

Grade reports will not be released for students who have outstanding bills in the Business Office or who have overdue books in the Library.

GRADE CHANGE AND REVIEW PROCEDURES

Responsibility for resolving grade disputes is shared among the instructor, the student, the appropriate Academic Administrator, and the Vice President of Academic Services.

Under Mid Michigan Community College policy, it is the instructor's prerogative to determine student grades. If a student has a question about a grade, the student must first discuss the matter with the instructor. The instructor should discuss the matter willingly and provide clear evidence for the basis of the grade issued. In turn, the student should provide a valid basis for grievances.

If the instructor agrees at this point to make a grade change, a Change of Grade form must be completed by the instructor, approved by the appropriate Academic Dean, and submitted to the Associate Dean of Student and Registrar.

If the instructor determines the grade should remain unchanged, and the student believes there is valid justification for a grade grievance, the student should contact the appropriate Dean. The Dean shall arrange an informal conference with the instructor and the student for purposes of resolving the conflict.

If, after such a conference, the student still believes there is valid justification for a grade grievance, the student must write a formal letter of grievance to the Vice President of Academic Services fully explaining the rationale for the grievance along with all relevant information pertaining to the matter. Upon receipt of the letter from the student, the Vice President of Academic Services will review the facts presented and make a determination of whether the case warrants a formal hearing.

This step of the procedure may include a conference between the student and the Vice President of Academic Services. If the Vice President determines there is no valid justification for the grievance, he/she will inform the student that the grade issued will stand unchanged. If the Vice President determines there is valid justification for the grievance, he/she will call the Grade Review Committee into session. This committee is composed of three faculty members, the Registrar or his/her representative, and the appropriate Dean. The Vice President of Academic Services shall chair the committee and appoint a recording secretary.

The grievance session shall be informal in nature with all the relevant facts being presented by the instructor and the student. After presentation of the facts, the Grade Review Committee will deliberate in closed session with the Vice President. The Vice President shall consider the assessment of the Grade Review Committee in rendering a decision to maintain or change the grade in question.

Prior to informing the student of the decision, the Vice President of Academic Services shall review the details of the grade grievance with the President or his/her designee. Within seven days of the conclusion of the hearing, the student shall be notified in writing of the decision. This written decision provided to the student is the final disposition of any grade grievance. No additional appeals are available.

Grade grievances must be initiated within 60 days after the last day of the class in which the grade was received.

ACADEMIC PROBATION AND DISMISSAL POLICY

Academic Probation or Academic Dismissal occurs when a student's cumulative grade point average falls below the following scale:

<table>
<thead>
<tr>
<th>ATTEMPTED GPA HOURS</th>
<th>ACADEMIC PROBATION</th>
<th>DISMISIAL POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 - 17</td>
<td>0.00 - 1.99</td>
<td>less than 1.0</td>
</tr>
<tr>
<td>18 - 37</td>
<td>1.00 - 1.99</td>
<td>less than 1.5</td>
</tr>
<tr>
<td>38 - 50</td>
<td>1.50 - 1.99</td>
<td>less than 1.6</td>
</tr>
<tr>
<td>51 - 63</td>
<td>1.60 - 1.99</td>
<td>less than 1.7</td>
</tr>
<tr>
<td>64 or more</td>
<td>1.70 - 1.99</td>
<td></td>
</tr>
</tbody>
</table>

Students who are on Academic Probation will be required to see their Academic Advisor for assistance and must follow the prescribed procedure(s) prepared by their Academic Advisor.

A student will be subject to academic dismissal if there is scholastic evidence that he/she can no longer benefit from or successfully work toward the completion of a program at MMCC. When this happens, they will be dematriculated for a minimum of one enrollment period (not counting spring/summer semesters) or until such time as they demonstrate...
a willingness to participate in activities that are designed to improve their academic records.

**ACADEMIC PROBATION & DISMISSAL PROCEDURES**

1. Academic Probation/Dismissal notification letters are mailed to students after grades are submitted. Students are prevented from registering or making schedule adjustments until contact is made with an Academic Advisor.

2. The procedure(s) for working with students on Academic Probation are:
   - If a student is placed on probation their Academic Advisor will, in consultation with the student, identify specific activities designed to assist academic progress. These activities are not limited to, but may include:
     1) additional assessment
     2) registering for a specific class
     3) repeating courses
     4) reducing credit hour load
     5) career exploration
     6) program change
     7) workshops
     8) tutoring

3. Students on academic probation who fall below the dismissal level as stated will be dismissed and will not be allowed to register for a minimum of one enrollment period (not counting spring semester).

4. Students who are dismissed may appeal the decision. The appeal must be initiated by the student prior to the start of the next semester. An official letter of appeal must be sent to the Registrar and Academic Support Services. The Registrar will review the appeal and letter and if warranted, will convene a dematriculation committee to officially review the appeal.

5. Students who continue on academic probation can re-enroll, but will be required to meet with an advisor.

6. A dematriculated student who wishes to register for any future semester(s) must first meet with an advisor.

**ACADEMIC HONESTY**

Students have an obligation to abide by accepted standards of academic honesty which dictate that all scholastic work shall be original in nature.

**MMCC POLICY ON ACADEMIC DISHONESTY AND PLAGIARISM**

**Academic Dishonesty**: includes, but is not limited to:

1. use of any unauthorized assistance in taking quizzes, tests, or examinations;
2. use of resources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
3. the acquisition, without permission, of tests or other academic material belonging to a member of the College faculty or staff;
4. engaging in any behavior specifically prohibited by a faculty member in the course syllabus or class discussion.

**Plagiarism**: Plagiarism is using another's ideas as one's own. Plagiarism has two forms, unintentional and intentional. Unintentional plagiarism is usually the result of students being unfamiliar with the academic conventions of citation and documentation. Intentional plagiarism is the result of students knowingly submitting the work of others as their own. This includes, but is not limited to the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

All acts of plagiarism and academic dishonesty will first be dealt with by the instructor. Penalties may range from revision to failing the assignment or the course. Instructors must report all acts of intentional dishonesty or plagiarism, or any penalty resulting in a failure of the course, to the Registrar. Repeated violations may result in further discipline, up to and including dismissal.

Students may appeal any grade affected by a charge of academic dishonesty or plagiarism through the Grade Grievance Procedure.

**ACADEMIC AMNESTY**

Academic Amnesty is an action of forgiveness provided to certain students who have experienced poor academic performance at MMCC. Through Academic Amnesty, a student will be awarded a “second opportunity” to achieve success at MMCC by removing the negative impact of less than “C” grade courses on the student’s academic transcript.

To be eligible for Academic Amnesty, a student must have:

1. A cumulative grade point average (GPA) of less than 2.0 for the period in question.
2. Recently completed at least 6 credit hours or more and have maintained a current 2.00 GPA or higher.
3. Allowed five (5) years to lapse between the poor academic performance and requirement number 2 listed above.

Once eligible, a student may petition the Academic Amnesty Committee by submitting a completed Application for Academic Amnesty form to the Office of Enrollment Services.
The Academic Amnesty Committee will review all requests. If Academic Amnesty is granted by the Committee it must be for one continuous enrollment period in a program at MMCC, as indicated by the courses taken by the student that are directly attributable to that program.

Once Amnesty has been approved by the committee and applied by the Registrar to the student’s (petitioner’s) transcript, the student will not be permitted to rescind the application of Amnesty on his/her academic record. Other conditions include:

1. No course work will be removed from the transcript.
2. A special notation explaining Amnesty approval will be placed on the student’s transcript.
3. Honor points and credit hours attempted during the amnesty period will be subtracted from the current cumulative honor points and credit hours attempted. A new cumulative grade point average will then be established.
4. Courses successfully completed with a grade of “C” or better during the amnesty period can be used toward the student’s certificate or degree requirements.
5. A student receiving Academic Amnesty will not be allowed to graduate with honors.
6. Academic Amnesty, when granted, applies only to Mid Michigan Community College courses. There is no guarantee, expressed or implied, that Academic Amnesty will be recognized by any other college or university.
7. Courses previously counted to fulfill degree requirements on a completed degree cannot be considered for Academic Amnesty.
8. Academic Amnesty can be granted only once to any student.

The Registrar has the responsibility of implementing Amnesty as stated in the Academic Amnesty Policy when it is granted to a student.

**GRADUATION REQUIREMENTS**

Graduation requirements for a certificate or associates degree are based on the regulations and requirements printed in the Mid Michigan Community College catalog in effect at the time of a student’s initial registration. A catalog published after initial registration may be chosen by the student when it is to his or her advantage, provided that the student has attended at least 1 semester per academic year. If a student stops out for a period of one year or more, the student will need to follow the catalog in effect at the time they reenter the college. For students with continual enrollment, there is a seven year time limitation on the use of a selected catalog; the time limitation on this is so that no student may graduate under the requirements of a catalog published more than seven calendar years prior to the date of graduation. Graduation requirements for certificate or associate degrees in limited seat programs are based on the regulations and requirements printed in the MMCC catalog in effect **at the time the student is officially accepted** into the program of study and is in effect for two years from that date. This time line is in effect because of the rapidly changing requirements in these specialized programs for job placement. Candidates for degrees or certificates must meet all of the following requirements to be eligible for graduation:

1. Apply for graduation prior to registration for your last semester. Students should apply by October 1 for Winter graduation (May) and April 1 for Spring/Summer/Fall graduation. Only students applying for Associate Degrees or Certificates of Achievement can participate in Commencement.
2. Earn a minimum of 15 credit hours at MMCC for an Associate’s Degree and 6 credits for a Certificate of Achievement or Training Credential.
3. Complete the number of credit hours required for each degree. A minimum of 62 is required for an Associate’s Degree and 31 for a Certificate of Achievement.
4. Maintain a 2.0 GPA or higher. Some programs require students to get a minimum grades in many or all of their courses. Students are expected to be aware of program specific grade requirements.
5. Courses numbered below 100 do not count toward graduation.
6. For each additional Associate Degree, a student must take an additional 12 credits at MMCC. For each additional Certificate of Achievement, a student must take an additional 6 credits at MMCC.
7. If a student has taken classes from another college, the transcript must be received by MMCC within six weeks after the scheduled gradation date in order to allow the student to graduate in said semester.

MMCC reserves the right to make changes in academic programs, graduation requirements, or grading policy at any time.

**GRADUATING WITH HONORS OR HIGH HONORS**

Graduation with honors or high honors is determined by the student’s cumulative GPA at the end of the last semester prior to graduation.

A student must have a cumulative GPA of 3.500 through 3.899 to graduate with Honors and cumulative GPA of 3.900 through 4.000 to graduate with High Honors.

Students who transfer credit into Mid Michigan Community College should note that a minimum of one-half of the student’s credits toward a program should be taken at MMCC to be eligible to graduate with honors.

**SEMESTER ACADEMIC HONORS**

*President’s List* recognition is awarded to a student who has earned a letter grade in 12 or more college-level credit hours and earned a 4.0 grade point average for that semester.
**Dean's List** is for a student who has earned a letter grade in 12 or more college-level credit hours and earned a 3.5 - 3.999 grade point average for that semester.

**Scholars List** is for a student who has earned a letter grade in 6 or more but fewer than 12 college-level credit hours with a 3.5 or higher grade point average for that semester.

President’s, Dean’s and Scholars Lists will be calculated at the end of the fall and winter semesters. A notation of these awards will be posted on the student's transcript for each eligible semester.

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**SUPPLEMENTAL SERVICES**

**CAMPUS BOOKSTORES**

MMCC currently owns and operates two bookstores, which are located at the Harrison Campus and the Mt. Pleasant Campus. MMCC Bookstores stock required textbooks and supplies for college courses. In addition, the Bookstores carry a variety of items including MMCC printed clothing, supplies, and gifts. The Bookstore sells many office supply items such as pens, pencils, folders, paper, computer flash drives and calculators. Backpacks and specialty book totes are stocked year-round. Many snack items including candy, chips, gum, and pop are available at both campus bookstores.

The Bookstore’s web site is www.bookstore.midmich.edu. Information regarding hours of operation, textbook info and bookstore announcements can be found on this website. You may also call 989-386-6640 to reach the Harrison Bookstore or 989-317-4620 to reach the Mt. Pleasant Bookstore.

**BOOKS & BEANS ESPRESSO CAFÉ**

Books & Beans Espresso Café is located at the Harrison Campus on the first floor and on the Mt. Pleasant Campus near the Bookstore.

**COMPUTER LABORATORIES**

All enrolled students have free access to an open computer lab for academic pursuits.

**LIBRARY (LLS)**

The Library Learning Services (LLS) is available to all MMCC students for a host of success-oriented services. LLS classes give students the option of taking entry-level Math and English in a more personalized and collaborative environment. In addition, if students are having difficulty in a class, they may take advantage of our additional support services. LLS writing and reading assistance is designed to help students with their writing and reading needs in any class. Whatever stage of the writing process a student may be at (ideas, drafts, finals), he/she may set up an appointment for consultation. Students can also get help with academic and textbook reading.

Any MMCC student may use all Math Lab services, multimedia, and self-instructional materials, even if he/she is not enrolled in an LLS Math course. Videotapes with lectures are available for Math 101, 104, and 105. They may be viewed in the lab or at home. Also, students from any math class may go to the lab for assistance with assignments from lecture classes; simply

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bring an assignment and textbook for help.

Peer tutoring and Supplemental Instruction (free services to students) are also set up through the Library Learning Services. If students are falling behind in their course work, they are encouraged to talk to their instructors first. Instructors are usually very eager to help students. At peak times, tutoring is provided on a first-come/first-serve basis, but our goal is to provide assistance to all students needing help. If we cannot provide you with a tutor, please talk to the LLS staff for other types of assistance.

In addition to these services, Library Learning Services is also the testing center for assessment testing, make-up and Internet classes, Credit by Exam classes, and the media site for research.

**ACCESS TO CAMPUS FACILITIES**

Students and non-College employees shall have access to the building only during normal operating hours, unless an approved (by the Vice President of Finance and Administrative Services or his/her designee) written exception is in effect.

During times when the College is not officially open, employees or individuals entering the facility should ensure that all entries are secured.

**HEALTH CARE SERVICES**

It is the student’s responsibility to maintain their own health care support services.

**HOUSING**

Mid Michigan Community College does not maintain housing for students.

**STUDENT ACTIVITIES**

**STUDENT IDENTIFICATION CARDS**

Student ID cards are issued to students who are registered for any MMCC class. The original ID card is free and replacement cards are available for $5.

**MMCC LAKER ATHLETICS**

The Mid Michigan Community College Lakers are part of the National Junior College Athletic Association (NJCAA) as a Division II community college. As a DII college, the Lakers can offer athletic scholarships. The program offers an opportunity to compete after high school. A number of students have even transferred on to play at colleges and universities after playing for the Lakers.

Funded by the student activity fee and fundraising events, the MMCC Lakers made their debut with a men's soccer team in Fall 2008. Today, the Lakers have men's and women's basketball teams that play home games at Morey Courts in Mt. Pleasant, a men's and women's cross country team and a men's and women's bowling team. Visit www.midmich.edu/athletics for more information.

**STUDENT CLUBS**

MMCC has a number of recognized student clubs that allow students to gather together, share experiences, and connect with their peers. All student clubs have MMCC advisors that help them organize and grow. Clubs can be formed around almost any topic and the student activity fee can even help with initial funding for the club. For more information, visit www.midmich.edu/studentlife.

**MID’S CAMPUS COUNCIL (MC²)**

MC² functions as an advisory body to provide activities and services to students of the college. It is also the student council and programming board of MMCC. The council is composed of an executive board and any student who wishes to participate is eligible to attend. The Board strives to offer student activities that meet a variety of interests. It also funds and supports student groups and athletics. Students and groups may present proposals requesting funding or council support for activities on campus. All proposals will be reviewed and voted on by the council. Students interested in being elected to MC² should contact the advisor at 989-386-6634 or a council member. Elections take place yearly or as needed to fill vacancies.

**PHI THETA KAPPA INTERNATIONAL HONOR SOCIETY ALPHA OMICRON OMICRON CHAPTER**

Phi Theta Kappa is the international honor society of the two-year college. Phi Theta Kappa has recognized academic excellence since 1918 and has become the largest, and one of the most prestigious, honor societies in higher education. More than 2.5 million members have been inducted at 1,275 colleges. Distinguished alumni include businessman H. Ross Perot, former UN Ambassador Jeanne Kirkpatrick, Apollo 13 Astronaut Fred Haise, Grammy-winning entertainer Rudy Gatlin and Emmy Award-winning actress Sela Ward.

Membership is primarily based upon academic achievement. Invitations to membership are extended twice a year to MMCC students who have completed at least twelve hours of coursework at MMCC and have a GPA of 3.5 or better.

Involvement with Mid’s Phi Theta Kappa chapter offers a myriad of opportunities for intellectual enrichment, fellowship, community service, personal development of leadership skills. In addition, members are eligible for scholarships on the campuses of most four-year colleges and universities.

MMCC’s Phi Theta Kappa chapter is extremely active and is committed to the society’s four Hallmarks: Scholarship, Leadership, Service and Fellowship, and to serving the college and surrounding communities.

**CAMPUS SAFETY, SECURITY, CRIME STATISTICE, PREVENTION & AWARENESS**

**CRIME PREVENTION/ANNUAL SECURITY REPORT**

MMCC is committed to offering students, staff, and visitors a positive learning environment. Our primary consideration
is for college-wide safety. As such, we rely on all members of the MMCC community to identify and report potential safety concerns. An important part of this process is through educating the community about potential hazards, available resources, guidelines for safety concerns, and disclosure of crime statistics that are reported to Campus Security, Campus Security Authorities, or local law enforcement. This information and MMCC’s crime statistics are available annually (by October 1st) through the publication and dissemination of the Annual Security Report. Publication of the Annual Security Report is done in accordance with federal law, specifically the Student Right to Know and Campus Security Act of 1990, renamed the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act.

A copy of MMCC’s most recent Annual Security Report is available at www.midmich.edu/securityreport or a paper copy may be obtained, at no charge, by contacting the Office of Student Oversight at (989) 386-6638 or by e-mail to mfarrell@midmich.edu.

CAMPUS SECURITY/LAW ENFORCEMENT

Overall campus safety and security concerns are coordinated through the Office of Student Oversight and in conjunction with the Campus Safety and Security Committee and the Core Crisis Response Team. Day-to-day Security is provided through the Whelan Security Company who maintains a Security Officer presence on both the Harrison and Mt. Pleasant Campuses. During the Fall and Winter Semesters, Security coverage is provided from 7:00AM to 10:00PM Monday through Thursday and from 7:00AM to 5:00PM on Friday. Summer coverage may vary, but will be secured while classes are in session for the duration of daily class times. A copy of MMCC Campus Security patrol locations can be found at: www.midmich.edu/clerygeography.

MMCC/Whelan Security Officers do not have the power to arrest but do have a duty to keep the campus community safe and uphold Campus Safety and Security regulations, as well as other MMCC Policies. MMCC abides by all Local, State, and Federal laws. Should violations occur, prosecution of all serious crimes are referred to the appropriate law enforcement/court venue and may also be addressed under the Code of Conduct or the College Administrative Disciplinary Procedure. Students are expected to adhere to the laws governing the community, as well as the College’s rules and regulations governing conduct as set forth in this Catalog and other policy manuals. All rules and regulations apply to all College property and at all College-sponsored events.

MMCC shall make ‘timely reports’ to the campus community when crimes are considered to pose an ongoing threat to the campus community. To learn more about MMCC’s Timely Warning and Emergency Notification processes visit: www.midmich.edu/application/files/7514/7256/0033/Emergency_Notification_and_Timely_Warning_Policy_9-16.pdf

INCIDENT REPORTING

Reports of any act (criminal or otherwise) which threaten a person, damage property or result in harmful implications, can be made to Campus Security as follows:

Harrison Campus Security
Room 104
(989) 339-4204

Mt. Pleasant Campus Security
Doan Center Room 103 (989) 339-7323

Or to the Office of Student Oversight as follows:

Coordinator of Student Conduct and Institutional Compliance Deputy Title IX Coordinator-Office of Student Oversight:
Martricia Farrell
Harrison Campus, Office 107
(989) 386-6622, Ext. 394

Student Conduct and Institutional Compliance Office Office of Student Oversight:
Ryan Harkrader
Mt. Pleasant Campus
Doan Center Office 104
(989) 773-6622, Ext. 548

Dean of Student and Academic Support Services Chief Title IX Coordinator:
Kim Barnes
Harrison Campus, Office 112
(989) 773-6622, Ext. 236

If you or someone else are in the midst of an emergency, please dial 9-1-1

The College also provides an online reporting system called Maxient. This is available to the campus community and is used to report any behavior that is disconcerting. This behavioral conduct involves issues of threatening/hostile behavior, harassment, sexual misconduct (including incidents of intimate partner violence (dating/domestic violence)), sexual assault, stalking, violations of the Code of Conduct, or unusual behavior that is outside the norm or disturbing. Reports submitted through Maxient are routed to the Office of Student Oversight. They are referred to the appropriate College Official who will respond to the report and take appropriate action. The online concern form is located inside the Portal on the menu or at www.midmich.edu/incidentreport.

STUDENT COMPLIANT PROCESS

MMMC is committed to supporting students through their educational journey. While we strive to offer beneficial assistance to our students, we recognize that periodically, students may encounter issues that need to be addressed. We encourage students to discuss concerns/complaints with
the appropriate college personnel. We cannot improve our processes or facilitate solutions if we are not aware of issues. No retaliation of any kind shall be taken against a student for participation in a complaint or grievance.

Should there be concerns, some common Offices and contact numbers are listed below:

**Office of Student Oversight**
Harrison Campus (989) 386-6622 ext. 394  
Mt. Pleasant Campus (989) 386-6622 ext. 548

**Title IX Coordinators**
Chief Title IX Coordinator (989) 386-6622 ext. 236  
Deputy Title IX Coordinator (989) 386-6622 ext. 394

**Equal Opportunity/Affirmative Action Personnel Services**
(989) 386-6621

**Financial Aid**
(989) 386-6664

**Registrar/Director of Academic Advising**
(989) 386-6622 ext. 395

**Dean of Students and Academic Support Services**
(989) 386-6622 ext. 236

If you have a complaint or concern regarding an instructor, it is recommended that you discuss the issue with the instructor. If you do not feel comfortable discussing the issue with the instructor or this is not an option, you may complete the Instructor Concern Form located at: www.midmich.edu/academics/academic-standards-services/student-concern-form

Whether you are a victim or have witnessed an incident, you are encouraged to contact the Office of Student Oversight (listed above) or complete an online concern form at www.midmich.edu/incidentreport for any of the following issues: acts of discrimination, harassment, sexual misconduct, violations to the Code of Conduct, acts of academic dishonesty, threatening behavior, behavioral or wellness concerns.

**STUDENT RIGHT TO KNOW**

While pertinent student information is located throughout this catalog and on the MMCC website, the Student Right to Know Page offers an easy way to access information and materials that provide students the opportunity to make fully informed choices regarding MMCC. The Student Right to Know Page is located at www.midmich.edu/righttoknow and is in accordance with the Student Right to Know Act of 1990, which requires Federally Title IV funded Colleges and Universities to disclose certain information to prospective and enrolled students, parents, and employees.

By providing this information in one location, our objective is to make this site as resourceful and efficient as possible. Students are encouraged to become familiar with the information housed on the Student Right to Know Page. We hope the provided information will assist students in making the best possible choices for their future educational journey.

**ALCOHOL AND OTHER DRUG POLICY**

**Introduction**

Mid Michigan Community College is committed to providing a safe and healthy learning environment and as such, recognizes that improper or excessive use of alcohol and other drugs may disrupt the learning community by negatively impacting the health and safety of our students, faculty and staff. Problems such as memory loss, harassment, sexual misconduct, assaults, disorderly/disruptive behavior, and sleep disruption tend to increase in correlation to the misuse of alcohol and/or other drugs. Due to the harm produced by excessive and illegal use, MidMichigan Community has established polices and sanctions to prohibit unlawful behaviors and address policy violations by members of the MMCC Community.

In accordance with the Drug-Free Workplace Act and Drug-Free Schools and Campuses Act, Mid Michigan Community College is required to have an alcohol and other drug policy which is distributed annually to all students, faculty and staff. The Policy must include the College's prevention, educational and intervention efforts, the consequences that may be applied by both the College and external authorities for violations along with the possible health risks associated with the use and abuse of alcohol and other drugs. A list of internal and/or external resources is also provided.

**Policy Statement**

Mid Michigan Community prohibits the possession, use, distribution, and unlawful manufacture of illegal drugs, narcotics or controlled substances on MMCC's campuses. Alcohol is prohibited on campus except when a written Exception Request is submitted for consideration and is approved by MMCC's Board of Trustees. It is the responsibility of each student, faculty, and staff member to be familiar with the provisions of the Policy and also the State of Michigan laws as they pertain to alcohol and drug use and abuse. The College's Alcohol and Other Drug Policy places responsibility for individual and group conduct on the individuals who use drugs and consume alcohol. Using drugs and drinking alcoholic beverages are not excuses for irresponsible behavior. Individuals and groups are held accountable for their behavior whether or not they have consumed drugs or alcohol.

Michigan law prohibits the dispensing, selling or supplying of drugs or alcohol to any person under the age of 21. Students, faculty, staff and visitors to the College may not unlawfully manufacture, consume, possess, sell, distribute, transfer or be under the influence of alcohol, illicit drugs, or a controlled substance on College property, at College-related events, while driving a College vehicle or while otherwise engaged in College business. College property includes all buildings and land owned, leased, or used by the College; motor vehicles.
operated by employees, including personal motor vehicles when used in connection with work performance on behalf of the College.

Any person taking prescription drugs or over-the-counter medication is individually responsible for ensuring that while taking the drug or medication, they are not a safety risk to themselves or others while on College property, at College-related events, while driving a College or privately owned vehicle while engaged in College business. It is illegal to misuse prescribed drugs contrary to the prescription; give or sell the prescribed drug(s) to another person.

For MMCC’s full Alcohol and Other Drug Policy visit www.midmich.edu/alcoholandotherdrugpolicy.

SMOKE, TOBACCO, AND E-CIGARETTE POLICY

To promote the health and well-being of its students, faculty, staff, and to reduce involuntary exposure to secondhand smoke, smoking and/or the use of any tobacco products, vapor or e-cigarettes is prohibited within or outside of all facilities, vehicles, and grounds that are owned, leased or operated by Mid Michigan Community College. No designated areas will be provided by the College for smoking or the use of tobacco products, vapor or e-cigarettes. Students, faculty, staff and visitors may continue to smoke and/or use tobacco products, vapor or e-cigarettes in their personal vehicles when attending class, working, or visiting any MMCC campus location.

Legal Sanctions:

Taking into consideration that each and every student and employee benefits from a smoke and tobacco-free environment, the enforcement of this Policy is equitably placed on all members of the College community. Students, faculty, staff and visitors are expected to adhere to the Policy and persons that repeatedly disregard the Policy will be subject to disciplinary channels and processes defined under MMCC’s Conduct Guidelines.

STUDENT CODE OF CONDUCT

Students are required to engage in responsible social conduct and model appropriate and professional behavior that promotes a collaborative and optimal learning environment. Conduct violations that disrupt the College environment are not tolerated and are addressed assertively. The three classes of misconduct that are subject to disciplinary action are 1) violations of civil/criminal law, 2) disruption of the educational process, and 3) violation of College rules, regulations and policies. Should a violation occur, the Office of Student Oversight is authorized to investigate, render a determination and impose sanctions upon any student(s) found to have violated the Code of Conduct. For the complete Student Code of Conduct and applicable rules, regulations, definitions and sanctions, please refer to www.midmich.edu/conduct.

The Student Code of Conduct applies to all MMCC locations including off-site campus locations, internships, studies abroad, club and athletic events, and at any College-sponsored activity or event. Off-campus behavior that may adversely affect the College and/or the pursuit of its objectives may also be considered violations of this Code. Below are examples of conduct violations. Any student found to have committed or attempted to commit any of the following misconducts would be subject to disciplinary sanctions:

- Acts of dishonesty or plagiarism
- Disruption or obstruction of teaching or other College activities
- Physical abuse, verbal abuse, bullying, threats, stalking, intimidation, harassment, coercion, and/or other conduct which threatens or endangers the health or safety of any person
- Any sexual harassment or sexual misconduct or any other violation of the College’s Non-Discrimination, Harassment, and Sexual Misconduct Policy
- Attempted or actual theft of and/or damage to property of the College or member of the College community
- Hazing
- Failure to comply with the directives of College officials or law enforcement officers acting in the performance of their duties
- Unauthorized possession, duplication or use of keys to any College premises or unauthorized entry to or use of College premises
- Violation of any federal, state, local law or College policy, rule, or regulation published in hard copy or available electronically on the College website
- Use, possession, manufacturing, or distribution of alcoholic beverages, marijuana, heroin, narcotics, or other controlled substances except as expressly permitted by law, or any violation of the MMCC Alcohol and Other Drug Policy
- Possession or use of firearms, explosives, other weapons, or dangerous chemicals on College premises
- Participating in an on-campus or off-campus demonstration, riot or activity that disrupts the normal operations of the College
- Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at College sponsored or supervised functions
- Conduct that is disorderly, lewd, or indecent; breach of peace
- Theft or other abuse of computer facilities and resources
- Abuse of the Student Conduct System
- Bringing children on campus and leaving them unattended
**Conduct Process**

Any member of the College community may file a Complaint against a student for violation of the Student Code. A Complaint should be submitted through the online reporting system (Maxient) or prepared in writing and directed to the Office of Student Oversight. Any Complaint should be submitted as soon as possible after the event occurs. The online reporting form can be accessed at www.midmich.edu/incidentreport or by contacting the Office of Student Oversight at (989) 386-6638.

An Office of Student Oversight investigation shall be conducted and will follow the general timeline below. It shall be concluded within 30 days (excluding any Appeal):

- Alleged violation received (Day 1)
- Case Manager determines extent of investigation and assigns matter to an Investigator from the Office of Student Oversight; a preliminary investigation may be necessary and interim measures may be implemented (Day 2-7)
- Initial intake by the Investigator will include a brief meeting with the reporting party or the Complainant
- The Investigator will notify the Accused, in writing (e-mail is an acceptable method of delivery), of the Complaint/Report, will outline the charge(s) and will further provide: (Day 8-10)
  - A copy of their Rights
  - Information regarding possible sanctions that could be issued, should the Alleged be found responsible using the preponderance of evidence (or more likely than not standard)
  - The Alleged will also be provided with an outline of the Administrative Model/Conduct Process, as well as next steps
- The Investigator will meet with the Alleged and any witnesses. The Investigator may meet with the Reporting party for fact finding/investigation. (Day 10-20)
- The Investigator will prepare a Case Summary and Determination, including findings, rationale and sanctions and provide a written copy to the Alleged, along with Appeal information. E-mail is an acceptable method of delivery. (Day 21-30)

**Sanctions**

Sanctions may be imposed upon any student found to have violated the Code of Conduct, including but not limited to: a warning, No Contact Order, probation, loss of privileges, fines, restitution, referral for external assessment, behavior contract, discretionary assignment, suspension, expulsion, renovation of admission, withholding of transcript or degree, or immediate removal from the Campus. More than one of the listed sanctions may be imposed for any single violation and may also be applied to a student group or organization.

**Right to Appeal**

A decision reached by the Office of Student Oversight and sanctions imposed may be appealed by the Alleged Student(s) to the Appeal Board within five (5) business days of the decision. Such appeals must be made in writing and shall be delivered to the Office of Student Oversight Case Manager or their designee.

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**TITLE IX POLICY**

**POLICY STATEMENTS**

Mid Michigan Community College (MMCC) is committed to maintaining a productive environment for students, faculty, staff, and visitors to work and learn, unhindered. Our primary concern is for the safety of our students, employees, and visitors. As such, all members of the campus community (including students, employees, staff, faculty, guests, vendors and visitors) have the right to freedom from all forms of discrimination, harassment and sexual misconduct. All members of the campus community are expected to conduct themselves in a manner that does not infringe upon the rights of others. Mid Michigan Community College maintains a zero tolerance for acts of discrimination, harassment, and sexual misconduct. The College does not discriminate on the basis of sex in our educational programs or activities. When an allegation of misconduct is brought to an appropriate administrator's attention and a Respondent is found to have violated the Policy, serious sanctions will be used to reasonably ensure that such actions are never repeated. MMCC's Campus Non-Discrimination, Harassment and Sexual Misconduct Policy reiterates these principles and provides recourse for those individuals whose rights have been violated. The Policy is intended to define community expectations and establish a standard for determining when those expectations have been breached.

**DUTY TO REPORT**

MMCC encourages all members of the campus community to promptly report allegations of discrimination, harassment, or sexual misconduct to one of the Title IX Coordinators or Deputy Coordinator. MMCC has designated Responsible Employees. These individuals have an obligation under Title IX to report any incident of discrimination, harassment, or sexual misconduct to the Title IX Coordinator or Deputy as soon as a complaint is made. Failure by a Responsible Employee to report a suspected conduct violation may result in significant discipline, which could result in removal from their position. Complaints may be verbal, written, or reported as witnessed. Complaints of discrimination, harassment or sexual misconduct, investigative documents, and materials relative to the resolution of the matter will be maintained electronically in the appropriate office. All documents will be confidential to the extent allowed under State and Federal Law.

The College has determined the following individuals to be Responsible Employees:

- All individuals working in Student Services, Student Life,
Admissions, Campus Security, and Athletics

- Campus Security Authorities designated by the College under the Clery Act and not otherwise specified in this provision
- College Faculty or staff traveling with students or supervising students on College-sponsored events or travel
- Any individual (employee or non-employee) who serves as an advisor or coach to College-recognized student groups

AMNESTY

In the course of good faith reporting, if any student is found to be in violation of a non-violent student conduct issue, no act of retribution from the College will be taken against said student.

JURISDICTION

MMCC has jurisdiction and will respond to allegations of misconduct that occur on college property, at college sponsored activities or events, and/or when both the accused person and alleged victim are a student, faculty, or staff member. MMCC does not have jurisdiction over allegations between visitors or non-affiliated persons. MMCC has the discretion to investigate acts of misconduct occurring off college property when a definite, legitimate and substantial college interest exists or at non-college sponsored activities and events if the Complainant and Respondent are members of the campus community. Any actions taken by the College are administrative in nature and separate from any criminal proceeding related to the reported misconduct. These actions may occur while a criminal proceeding is ongoing. Actions taken by the College will not be delayed or dismissed when criminal charges have been reduced, dismissed, or when a criminal proceeding is pending. Further, MMCC may continue with its investigation if a party is no longer a student or employed at the College.

RETRIBUTION

No person shall be penalized for using, in good faith, channels available for resolving complaints of misconduct. Retaliation includes but is not limited to: intimidation, threats, harassment, or any other adverse action threatened or taken against any person for engaging in protected activity.

Anyone who believes that they have been the victim of retaliation for opposing discriminatory behavior, reporting sexual misconduct, or participating/cooperating in an investigation, should immediately contact one of the Title IX Coordinators listed herein. Any person found to have retaliated against a person for engaging in protected activity will be in violation of the Policy and may be subject to disciplinary action.

FALSE STATEMENT

Should the College’s investigation reveal that a complaint was knowingly falsified and/or that false evidence was knowingly and willfully provided, the complaint will be dismissed and the person who knowingly filed the false complaint and/or provided the false evidence may be subject to disciplinary action.

CONFIDENTIALITY

While MMCC encourages all members of the campus community to report incidents of discrimination, harassment or sexual misconduct, Responsible Employees have a duty to report such actions to one of the College’s Title IX or Deputy Coordinators. Responsible Employees are encouraged to disclose this obligation of their position before any statement is made to them. All complaints will be promptly and thoroughly investigated by one of the College’s Title IX Coordinators or designees. The College will make reasonable and appropriate efforts to ensure an individual’s privacy and protect confidentiality when conducting an investigation and resolving a complaint, except as otherwise required by law. Should a Complainant request confidentiality or ask that a complaint not be investigated, the request will be considered but the College cannot guarantee that said request will be honored. If a Complainant insists that their name not be disclosed to the Respondent, the College’s ability to respond may be limited. In limited circumstances involving serious or repeated conduct or when the Respondent may pose a persistent threat to the campus community, the College reserves the right to investigate regardless of a Complainant’s request for confidentiality. The College is required by the Federal Clery Act to statistically report certain types of crimes including certain types of sexual misconduct. Confidentiality is maintained when filing the report and no personal information about the Complainant or Respondent is revealed. The Annual Disclosure of Crime Statistics reports types of criminal incidents, only.

PROHIBITED ACT, TERMS AND DEFINITIONS

Discrimination

Mid Michigan Community College prohibits any form of discrimination against any person on the basis of race, color, religion, sex, gender identity or expression, pregnancy, age, sexual orientation, marital or parental status, national origin, citizenship, disability, military or veteran status, or any other legally-protected status, in the administration of and access to the College’s programs and activities and in conditions of admission or employment. Mid Michigan Community College is committed to and adheres to the principles of all applicable state and federal equal opportunity laws and regulations for its students, faculty, staff and applicants for admission and employment.

Gender Discrimination/Harassment

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving federal financial assistance.” – Title IX of the Education Amendments of 1972

Gender discrimination/harassment can be based on actual or perceived gender, sexual orientation, gender identity or gender expression. This may include acts of aggression, intimidation, or hostility; whether verbal or non-verbal, graphic, physical, or otherwise, even if the acts do not involve conduct of a sexual
nature. The harassing behavior creates a hostile environment if the conduct is sufficiently severe, persistent or pervasive enough that it has the effect of unreasonably interfering with, denying, or limiting someone's ability to participate in, or benefit from, the College's educational program and/or activities.

Pregnancy
The College will not discriminate against any student or employee or exclude any student or employee from its educational program or activity (including any class or extracurricular activity) on the basis of such individual's actual or potential parental, family, marital status, pregnancy, childbirth, false pregnancy, termination of pregnancy or recovery therefrom, unless the individual voluntarily requests to participate in a separate portion of the program or activity of the College.

The College will not deny such an individual access to or participation in classes, extracurricular programs, athletics, honor societies, opportunities for student leadership, or other activities. The College will treat pregnancy, childbirth, false pregnancy, termination of pregnancy and recovery therefrom as justification for a leave of absence for so long a period of time as is deemed medically necessary by the person's physician; at the conclusion of which, the person shall be reinstated to the status that was held when the leave commenced. Further, MMCC will allow students the opportunity to make up any missed work in a manner selected by the student, which is reasonably equivalent to the work missed and within a reasonable timeframe. The College may require a pregnant student or a student who has given birth to obtain a certification from a physician stating that the student is physically and emotionally able to continue participation in the normal education program or activity, so long as such a certification is required of all students for other physical or emotional conditions requiring the attention of a physician.

Hostile Environment
A hostile environment is defined as an environment on campus that through harassing conduct (e.g. physical, verbal, graphic or written) based on a person's protected status (e.g. race, age, sexual orientation), becomes sufficiently severe, persistent, pervasive, and objectively offensive enough that it alters the conditions of employment or limits, interferes with, or denies educational benefits or opportunities from both a subjective (alleged victim) and an objective (reasonable person) viewpoint.

Sexual Misconduct
The term Sexual Misconduct will be used throughout sections of this document and is considered an all-inclusive term used to identify a number of unwelcomed behaviors of a sexual nature that would constitute sex-based harassment or discrimination under Title IX. They include sexual violence, sexual assault, sexual harassment, dating violence, domestic violence, sexual exploitation, stalking, and all forms of discrimination relating to one's sex or gender identity. Sexual misconduct may occur in any sex or gender composition—between members of different sexes or the same sex, regardless of gender or gender identity.

Sexual misconduct may vary in its severity and consists of a wide range of behaviors.

The following terms and definitions are provided as an overview:

- **Consent:** Consent is clear, knowing, and voluntary; active, not passive; silence in and of itself, cannot be interpreted as consent. Additionally, consent to any one form of sexual activity cannot automatically imply consent to any other form of activity nor can previous consent be construed to imply current consent. Consent cannot be given by someone who is not of legal age or by someone who is reasonably known to be (or should have been known to be) mentally or physically incapacitated. The State of Michigan does not have one single definition of consent nor is it an element of criminal sexual conduct that prosecutors are required to disprove beyond a reasonable doubt. Michigan's standard criminal jury instruction states that: a person consents to a sexual act by agreeing to it freely and willingly, without being forced or coerced. It is not necessary to show that the Complainant resisted the Defendant to prove that this crime was committed. Nor is it necessary to show that the Complainant did acts to lessen the damage to him/herself. Therefore, consent is likely to be defined as a free and willing agreement to engage in a sexual act, provided without force or coercion, between individuals who are of sufficient age and are not mentally incapable, mentally disabled, mentally incapacitated or physically helpless.

- **Crime of Violence:** An offense that has the use, attempted use, threatened use or element of physical force against the person or property of another; any other offense that is a felony and that, by its nature, involves a substantial risk that physical force against the person or property of another may be used in the course of committing the offense.

- **Force:** Physically imposing and/or the use of physical force against someone to gain sexual access. Force includes threats and intimidation.

- **Coercion:** Unreasonable pressure for sexual activity. When someone stipulates that they do not want to go past a certain point of sexual interaction, continued pressure beyond that point is coercion.

- **Sexual Harassment:** Unwelcome conduct of a sexual nature and includes any unwelcome sexual advances, requests for sexual favors, or other verbal, nonverbal, or physical conduct of a sexual nature. The harassing conduct creates a hostile environment if the conduct is sufficiently severe, persistent or pervasive enough that it has the effect of unreasonably interfering with, denying or limiting someone's ability to participate in, or benefit from, the College's educational program and/or activities.

Below are the various forms of sexual misconduct and their definitions:
• **Sexual Harassment-Verbal:** Unwanted speech directed at another that is sexual in nature and creates a hostile environment for a student or employee

• **Sexual Harassment-Non-Verbal:** The licking of lips, using sexual motions or gestures, leaving gifts or other non-verbal acts that are sexual in nature, are unwanted, and create a hostile environment for a student or employee

• **Non-Consensual Sexual Intercourse or Penetration:** The insertion of any object, however slight, into the vagina or anus of another without their consent; inserting a penis into the mouth of another without their consent; orally penetrating the vagina of another without their consent (or any of the above mentioned when the person is incapable of giving consent due to physical or mental incapacitation or age)

• **Non-Consensual Sexual Contact:** Intentional contact with the breasts, buttocks, groin, or genitals; touching another with any of these body parts or making another touch you or themselves with or on any of these body parts; any intentional bodily contact in a sexual manner even if not involving contact with/of breasts, buttocks, groin, genitals, mouth or other orifice

• **Quid Pro Quo:** Exists when there are unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature; and submission to or rejection of such conduct results in adverse educational or employment action

• **Sexual Exploitation:** Occurs when a person takes non-consensual or abusive sexual advantage of another for their own advantage or benefit, or to benefit or advantage anyone other than the one being exploited; and that behavior does not otherwise constitute one of the other sexual misconduct offenses

**Dating Violence:** Violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim.

- The existence of the relationship shall be determined based on the reporting party’s statement and with consideration given to the length of the relationship, type of relationship, and the frequency of interaction between the persons involved in the relationship
- Violence includes but is not limited to, sexual or physical abuse or the threat of such abuse

**Domestic Violence:** A felony or misdemeanor crime of violence committed by any of the following individuals:

- A person with whom the victim shares a child in common
- A person who is cohabitating with or has cohabitated with the victim, as a spouse or intimate partner
- A person similarly situated to a spouse of the victim under the domestic or family violence laws of the jurisdiction in which the crime of violence occurred, or
- Any other person against an adult or youth victim who is protected from that person’s acts under the domestic or family violence laws of the jurisdiction in which the crime of violence occurred

**Stalking:** Engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for his/her safety or the safety of others or suffer substantial emotional distress. (MMCC considers cyberstalking, recording or transmitting sexual images, and voyeurism to be a form of stalking and a violation of this Policy.)

- **Course of Conduct** means two or more acts, including but not limited to, acts in which the stalker directly, indirectly or through a third party, by any action, method, device, or means, follows, monitors, observes, surveils, threatens, or communicates to or about a person or interferes with a person’s property.
- **Reasonable Person** means a reasonable person under similar circumstances and with similar identities to the victim.
- **Substantial Emotional Distress** means significant mental suffering or anguish that may, but does not necessarily require, medical or other professional treatment or counseling.

**Reporting a Complaint**
Mid Michigan Community College strongly encourages anyone who experiences or observes any acts of discrimination, harassment, or sexual misconduct to promptly report the incident(s) and seek assistance from the College. The College can only take corrective action when it becomes aware of a problem. The College reserves the right to act as a Complainant and initiate proceedings without a formal complaint by the victim of discrimination.

Any student, staff member, third-party, or bystander who experiences, observes, or becomes aware of any acts of misconduct is encouraged to report it to Campus Security, one of the College’s Title IX Coordinators or Deputy, or by using the online incident report form.

The online reporting form is the most effective reporting method and can be found at:

www.midmich.edu/incidentreport
Reports may also be made directly to one of Mid Michigan Community College’s Title IX Coordinators or Deputy Coordinator. All Title IX investigators receive yearly training on issues related to sexual discrimination, sexual harassment, sexual misconduct, sexual assault, domestic violence, dating violence, and stalking. Investigators are educated on conducting an investigation and implementing processes that protect the safety of victims and promote accountability.

Kim Barnes  
Executive Dean  
Student/Academic Support Services  
Chief Title IX Coordinator  
Mid Michigan Community College  
1375 S. Clare Ave.  
Office 107  
Harrison, MI 48625  
(989) 773-6622, Ext. 236  
kbarnes@midmich.edu

Martricia M. Farrell  
Conduct & Instructional Compliance Coordinator  
Office of Student Oversight  
Deputy Title IX Coordinator  
Mid Michigan Community College  
1375 S. Clare Ave.  
Office 112  
Harrison, MI 48625  
(989) 386-6622, Ext. 394  
mfarrell@midmich.edu

Title IX Coordinator for Employees:  
Lori Fassett  
Executive Director  
Personnel Services  
Title IX Coordinator  
Mid Michigan Community College  
1375 S. Clare Ave.  
Harrsion, MI 48625  
(989) 386-6622, Ext. 692  
lfassett1@midmich.edu

If a complaint involves both a student and employee, a joint investigation will occur involving both the student and employee Title IX Coordinator or Deputy. The lead office handling the matter will be determined by the source of the original complaint. If the complaint originates with a student, the Student Title IX Coordinator or Deputy will act as the responsible office. If the complaint originates with an employee, the Employee Title IX Coordinator will be the responsible office. Investigations regarding third parties will be handled by the Employee Title IX Coordinator.

When filing, a complaint should thoroughly and concisely describe the alleged incident(s) including the date, time and location. Any supporting documentation should be included with the complaint. The names of potential witnesses should also be included.

Upon receipt of the complaint, an initial review will commence to determine if there is reasonable cause to believe that a violation of the policy has occurred. The type of disciplinary proceeding follows the College administrative model. If there is reasonable cause, the College will initiate a prompt, thorough and impartial investigation and if appropriate, impose interim measures. These interim measures may include assistance in changes to academic issues, matters of transportation, working situations, or protective measures such as separating the parties, placing limitations on contact between the parties, suspension, or making alternate class placement or workplace arrangements. The College will confidentially maintain details of any accommodations or protective measures provided to the Victim to the extent that such confidentiality would not impair the ability of the College to provide the accommodations or protective measures.

Investigation of the complaint is designed to provide a fair and reliable determination about whether any policy violation has occurred. If so, the College will implement a prompt and effective remedy designed to end the discrimination, prevent its recurrence and address its effects on the Complainant and others, as appropriate. For sexual harassment findings including sexual misconduct, the College will take these actions regardless of whether or not the sexual violence is the subject of a criminal investigation.

This procedure is intended to apply to acts of discrimination, harassment, and sexual misconduct, including sexual assault, dating violence, domestic violence, and stalking; all other grievances involving students will be addressed through the Code of Conduct and will follow the administrative model.

Voluntary Informal Resolution

In the event that the Title IX Investigator believes that the matter may be resolved by informal means, the Investigator may suggest the informal process to the Complainant and Respondent. If agreeable, the Investigator may work with the parties to reach a resolution. The informal resolution will still act to end the misconduct, prevent its reoccurrence and remedy its effects; lesser sanctions may be imposed. In cases where an informal resolution is reached, the Investigator will prepare the Informal Case Resolution Agreement and provide, in writing, copies to both the Complainant and Respondent. The Complainant and Respondent may end the informal resolution process at any point and request, in writing, that the matter proceed to the formal investigation/Administrative Model.

**NOTE** In cases of alleged sexual violence the informal resolution process is not available.
Office of Civil Rights

A complaint can be filed by anyone who believes that a school receiving Federal financial assistance, has discriminated against someone on the basis of race, color, national origin, sex, disability, or age. The person or organization filing the complaint need not be a victim of the alleged discrimination but may complain on behalf of another person or group. For information on how to file a complaint with the Office of Civil Rights (OCR), visit http://www2.ed.gov/about/offices/list/ocr/complaintintro.html or contact OCR’s Customer Service Team at 1-800-421-3481.

Office for Civil Rights
Cleveland Office
U.S. Department of Education
1350 Euclid Avenue, Suite 325
Cleveland, OH 44115
Telephone: (216) 522-4970; Facsimile: (216) 522-2573
Email: OCR.Cleveland@ed.gov

For a full copy of MMCC’s Campus Non-Discrimination, Harassment, and Sexual Misconduct Policy including grievance procedures, visit www.midmich.edu/titleix

Voter Registration

Voter registration information can be found by visiting the Student Right to Know Page, which houses a link to the Michigan Secretary of State website. Voter registration applications can also be obtained on the Harrison and Mt. Pleasant Campuses.

Non-Discrimination Policy

Mid Michigan Community College is dedicated to providing a safe and healthy environment that is nondiscriminatory in nature and in which all individuals are treated with respect and dignity. Interactions between members of the campus community should be centered on integrity and mutual respect so that each member may fully experience and benefit from the opportunities the College provides.

Mid Michigan Community College prohibits any form of discrimination against any person on the basis of race, color, religion, sex, gender identity or expression, pregnancy, age, sexual orientation, marital or parental status, national origin, citizenship, disability, military or veteran status, or any other legally-protected status, in the administration of and access to the College’s programs and activities and in conditions of admission or employment. Mid Michigan Community College is committed to and adheres to the principles of all applicable state and federal equal opportunity laws and regulations for its students, faculty, staff and applicants for admission and employment.

Questions and complaints concerning Title IX of the Education Amendments of 1972, including the College’s response to sex discrimination and sexual and gender-based harassment, may be referred to the Title IX Coordinator and/or the United States Department of Education:

Kim Barnes
Title IX Coordinator - Students
Executive Dean of Student and Academic Support Services
1375 S. Clare Ave.
Office 107
Harrison, MI 48625
(989) 386-6622 ext. 236
kbarnes@midmich.edu

Questions and complaints concerning other forms of discrimination in the educational or employment areas may be referred to the Civil Rights Coordinator and/or the United States Equal Employment Opportunity Commission:

Lori Fassett
Civil Rights Coordinator /Title IX Coordinator -Employees
Executive Director of Personnel Services
1375 S. Clare Ave.
Office 217
Harrison, MI 48625
(989) 386-6692
lfassett1@midmich.edu

United States Equal Employment Opportunity Commission
Detroit Field Office
Patrick V. McNamara Bldg.
477 Michigan Ave.
Detroit, MI 48226
Telephone: (800) 669-4000; Facsimile: (313) 226-4610

ACCESS TO RECORDS

Mid Michigan Community College policy grants access by students to their educational records under conditions which conform to the Family Education Rights and Privacy Act of 1974 as amended and regulated by the appropriate federal guidelines. A copy of this policy may be obtained upon request from the Office of Enrollment Services.
Directory information may be released unless a student informs the Office of Enrollment Services in writing that any or all items should not be released without the student’s prior consent. Directory information includes name, address, telephone number, date and place of birth, major field of study, participation in officially-recognized activities and sports, dates of attendance, degrees and awards received, and most recent previous educational agency or institution attended.

MMCC also reserves the right to release information without prior student consent under the following conditions:

1. Requests from faculty and staff who have a legitimate education interest on a "need to know" basis, including student employees or agents of the institution, if necessary to conduct official business, as authorized by the Registrar. See below for additional information on what constitutes legitimate educational interest. Legitimate educational interest includes performing a task related to the regular duties of the employee or agent, the student's education, the discipline of a student, a service or benefit for the student, or maintaining safety and security of the campus.

2. Requests in compliance with a lawful subpoena or judicial order.

3. Requests in connection with a student's application for or receipt of financial aid.

4. Requests by state authorities and agencies specifically exempted from the prior consent requirements by the Act.

5. Organizations conducting studies on behalf of the college, if such studies do not permit the personal identification of students to any persons other than to representatives of such organizations and if the personal identification data is destroyed when no longer needed.

6. Information submitted to accrediting organizations.

7. Requests by parents of a dependent student, as defined in Section 152 of the Internal Revenue Code of 1954.

8. In the case of emergencies, MMCC may release information from education records to appropriate persons in connection with an emergency, if the knowledge of such information is necessary to protect the health or safety of a student or other persons.

9. To authorized federal officials who have need to audit and evaluate federally-supported programs.

10. The results of any disciplinary proceeding conducted by the college against an alleged perpetrator of a crime of violence to the alleged victim of that crime.

11. To verify the accuracy of any information contained in what purports to be an official college document (e.g. a transcript or diploma) or is provided to a third party.

**THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)**

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's education records within 45 days of the day that MMCC receives a request for access.

Students should submit to the Registrar written requests that identify the record(s) they wish to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. Such requests should be sent to:

Registrar
Mid Michigan Community College
2600 South Summerton Road
Mt. Pleasant, MI 48858

2. The right to request the amendment of the student's education records that the student believes is inaccurate or misleading.

Student/parents may ask the college to amend a record that they believe is inaccurate or misleading. They should write the Registrar; clearly identifying the part of the record they want changed, and specify why it is inaccurate or misleading.

If the college decides not to amend the record as requested by the student/parent, the college will notify the student/parent of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if
the official needs to review an education record in order to fulfill his or her professional responsibility.

Upon request, the college discloses education records without consent to officials of another school in which a student seeks or intends to enroll. (NOTE: FERPA requires an institution to make a reasonable attempt to notify the student of the records request unless the institution states in its annual notification that it intends to forward records on request.)

4. Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by MMCC to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

   Family Policy Compliance Office
   U.S. Department of Education
   600 Independence Avenue, SW
   Washington, DC  20202-4605

SOCIAL SECURITY NUMBER DISCLOSURE STATEMENT

Federal law recognized the student’s Social Security Number (SSN) as personally identifiable information under the Family Education Rights and Privacy Act of 1974 (FERPA). However, the law allows Mid Michigan Community College to require and to use this information in compliance with state and federal guidelines. While you are not required to provide your SSN to be considered for admission to Mid Michigan Community College, you are strongly encouraged to do so, if you have one. Providing a SSN will speed up matching material such as transcripts and test scores with your application. A SSN is required if you are applying for financial aid or federal tax benefits, or for employment; it may be required for other purposes. The information may be disclosed only under certain circumstances, including the following:

- To other institutional officials
- To representatives of state and local educational authorities
- In connection with financial aid
- For research purposes to improve instruction
- To collection agents in connection with college-related businesses

Pursuant to an order from the court of law

Other circumstances are required by state or federal law

Mid Michigan Community College is committed to ensuring the privacy and confidentiality of student records.

VOTER REGISTRATION

Applications are available on both the Harrison and Mt. Pleasant campuses.
MISSION STATEMENT

The purpose of Mid Michigan Community College is to provide educational and community leadership for the development of human ability. To this end the College provides post-secondary education and services to enable students and the community to achieve success in a global society.

COLLEGE GOALS

Enduring Goal #1: Encouraging Student Success

The success of MMCC is tied inexorably to the success of our students. To accurately assess our students’ success, we must recognize that students choose MMCC for a wide variety of reasons; consequently, we must first accurately identify individual student’s goals and then facilitate each student’s ability to attain those goals. To that end, we must provide relevant, high quality instruction, programming, and services that adapt to diverse learning styles, that enhance students’ ability to perform in a global society, that support career advancement, and/or that facilitate successful transfer to a senior institution. To maintain both efficiency and a student-centered learning environment, MMCC must thoughtfully balance a high tech/high touch approach.

Enduring Goal #2: Engaging the Community

The success of MMCC depends on the support of the communities we serve. Consequently, we must continuously and deliberately develop and maintain mutually beneficial...
relationships with our multiple communities. At the same time, we must provide leadership in uniting our communities by positioning MMCC as a regional service provider. We must identify and prioritize the most significant needs of our communities, ensuring that our activities align closely with our mission.

**Enduring Goal #3: Enhancing Employee Impact**

The success of MMCC depends on our employees. We must provide effective leaders who value and support high standards of performance using clear direction and open, honest communication. We must work collaboratively to create, nurture, and sustain a culture of mutual support and service. To do so, we must align and support employees in positions that most effectively utilize, develop, and challenge their talents.

**Enduring Goal #4: Ensuring Institutional Effectiveness**

The success of MMCC depends on the way we work. In an unstable state and national environment, we must create our own stability yet be agile to serve the needs of both our internal and external customers. In times of economic uncertainty, we must develop and use our precious human, financial, and physical resources prudently and efficiently. We must ensure that our means of making decisions, communicating, and planning are streamlined yet inclusive. We must put the principles of the Academic Quality Improvement Program at the center of our operations, using data to guide our constant pursuit of excellence.

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**PROFILE OF MID MICHIGAN COMMUNITY COLLEGE STUDENTS***

As a community college, we are committed to assisting each student meet his/her unique goals. As illustrated by the Fall 2015 profile, our student body is diverse:

**Student Credit Hour Load**

- Male Full Time .......................................................... 17%
- Female Full Time .................................................. 16%
- Male Part Time ...................................................... 27%
- Female Part Time ................................................ 39%

**Student Age Distribution**

- Under 18 .......................................................................... 23%
- 18-25 ............................................................................. 58%
- 26-40 ............................................................................ 14%
- 41 & Over ........................................................................ 5%

**Geographical Residence**

- Clare County .............................................................. 19%
- Gladwin County ........................................................ 10%
- Isabella County .......................................................... 27%
- Gratiot County ............................................................ 8%
- Other Counties ............................................................ 36%

**Gender of Students**

- Female ........................................................................ 55%
- Male ........................................................................... 45%

**Declared Program Choices***

- Dual Enrolled .............................................................. 23%
- General ........................................................................ 3%
- Health Sciences ......................................................... 16%
- Occupational .............................................................. 21%
- Transfer ........................................................................ 31%
- Tech & Trade ............................................................... 6%

*Some students have more than one active program choice.

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**MMCC HISTORY**

The earliest activity in providing a community college to serve the Clare County/Gladwin County area began in 1962. Two years later the concept of the College was endorsed by the two local intermediate districts and the five local school districts within the two counties. As a result of the acceptance of this basic concept, a Citizens Advisory Council was formed to determine the feasibility of establishing a community college. The report of the Council, completed in 1965, recommended the formation of a local community college to serve the residents of the two-county area. The study report was then submitted to the Michigan Department of Public Instruction and notification of approval for the College was received in July, 1965.

In September, 1965, a special election was held to obtain community authorization for establishment of the College, to elect a governing Board of Trustees, and to approve construction and operating millage of 1.5 mills to be levied against the assessed property valuation in the voting district. The favorable response of the voters resulted in official approval by the Michigan State Board of Education to establish Michigan’s 25th community college.

During 1966-67, an administrative staff was employed to develop the initial planning for the Campus and for the instructional program. At the same time, the architect was developing a master plan for building construction and development of the entire 560-acre site. Construction of the initial $1.5 million instructional facility began in May, 1968.

In the fall of 1968, the first university parallel and the non-technical classes began in temporary facilities in the Clare County Building in Harrison. The Practical Nursing Program was started at the Central Michigan Community Hospital in Mt. Pleasant and the vocational and technical courses were conducted at the Area Vocational School in Mt. Pleasant.

Temporary facilities for the library and audio-visual materials were obtained from the Harrison Public Library. On September 15, 1969, the first classes moved to the present Campus location and on November 24, 1969, all of the remaining classes were moved. Meanwhile, classes continued to be held at the Mt. Pleasant locations.

Construction of the Food Service/Student Center was completed in 1972; the Goldberg Orientation Center, which originally
housed the College’s child care facilities, and a small engine repair building were added in 1973; the allied health facilities and the Automotive Technology Center were completed in 1976; and the Climate Control Center was constructed in 1979. Technical Trades Center opened for classes in the fall of 1983.

In December of 1993, the College purchased a three-story modern office building in Mt. Pleasant. The building was converted to a striking campus facility on an attractive site during 1994. The Mt. Pleasant Campus also serves the Isabella and Gratiot County areas.

In the fall of 1998, the College opened an extensive expansion with improvements on the Harrison Campus, adding new science and health education facilities.

In the fall of 1999, MMCC was granted funding for a Michigan Technical Education Center (M-TEC) to serve business, industry and the community. The Center was completed in 2001 and provides training for employees and potential employees of industrial and construction trades.

One of the main goals of the College is to better serve students, thus helping them achieve success. This goal was achieved with the addition of the Student Orientation and Academic Readiness (SOAR) Center which opened in August 2004. This Center consolidated student services and academic support in one building to provide more comprehensive, coordinated service centered on student needs. Students now have easier access to all services in an inviting atmosphere.

Recognizing the growing need for skilled healthcare professionals, MMCC opened the Herbert D. Doan Center for Science and Health Technologies in the Spring of 2008. Located on 44 acres in Mt. Pleasant, the Doan Center is a vital part of MMCC’s effort to expand its highly respected nursing program and establish new health science programs. The Center doubled MMCC’s available space in Mt. Pleasant and provided additional science labs, classrooms, and computer labs.

Further expansion continued at the site of the new Mt. Pleasant Campus. An addition to house student services (built on the same concepts as the Harrison Campus SOAR Center) was completed in March 2011. The Center for Liberal Arts and Science consolidated student services and academic support in one building to provide more comprehensive, coordinated service centered on student needs. Students now have easier access to all services in an inviting atmosphere.

Michigan Community College Association
To view or obtain copies of MMCC accreditation and licensing documents, contact the Office of the Vice President of Academic Services at (989) 386-6607 or visit www.midmich.edu/community/aboutmmcc/accreditation. Written requests may be mailed to 1375 S. Clare Avenue, Harrison, MI 48625.

A number of MMCC’s programs are also accredited/approved by other organizations. These include:

The Associate in Applied Science Degree in Medical Assistant is accredited by the CAAHEP—Commission on Accreditation of Allied Health Education Programs, 25400 U.S. Highway 19 N, Suite 158 Clearwater, FL 33763; (727) 210-2350; Fax (727-210-2354); www.caahep.org and the Medical Assisting Education Review Board, 20 North Wacker Drive, Suite 1575, Chicago, IL 60606; 1-800-228-2262; www.maeerb.org. Accreditation for this program was obtained on April 30, 1999, and has been granted reaccreditation until 2024.

The Associate Degree in Nursing is approved by the Michigan State Board of Nursing.

The Training Credential: Pharmacy Technician program 2016 re-accreditation process is currently under way through ASHP – Associate Society of Health-System Pharmacists.

The Associate in Applied Science: Physical Therapist Assistant Program at Mid Michigan Community College is accredited through 2024 by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314; Telephone: 703-706-3245; Email: accreditation@apta.org; Website: http://www.capteonline.org.

The Associate in Applied Science: The Radiography Program is approved by the Joint Review Committee on Education in Radiologic Technology (JRCERT) and has been granted reaccreditation through 2023.
The Magnetic Resonance Imaging (MRI) Program is currently seeking accreditation through the Joint Review Committee on Education in Radiologic Technology (JRCERT).

NON-DISCRIMINATION POLICY

Mid Michigan Community College is dedicated to providing a safe and healthy environment that is nondiscriminatory in nature and in which all individuals are treated with respect and dignity. Interactions between members of the campus community should be centered on integrity and mutual respect so that each member may fully experience and benefit from the opportunities the College provides.

Mid Michigan Community College prohibits any form of discrimination against any person on the basis of race, color, religion, sex, gender identity or expression, pregnancy, age, sexual orientation, marital or parental status, national origin, citizenship, disability, military or veteran status, or any other legally-protected status, in the administration of and access to the College’s programs and activities and in conditions of admission or employment. Mid Michigan Community College is committed to and adheres to the principles of all applicable state and federal equal opportunity laws and regulations for its students, faculty, staff and applicants for admission and employment.

Questions and complaints concerning Title IX of the Education Amendments of 1972, including the College’s response to sex discrimination and sexual and gender-based harassment, may be referred to the Title IX Coordinator and/or the United States Equal Employment Opportunity Commission:

**Title IX Coordinator**
Executive Dean of Student and Academic Support Services
1375 S. Clare Ave.
Harrison, MI 48625
(989) 386-6622 ext. 236
kbarnes@midmich.edu

**Office for Civil Rights**
Cleveland Office
U.S. Department of Education
1350 Euclid Avenue, Suite 325
Cleveland, OH 44115
Telephone: (216) 522-4970; Facsimile: (216) 522-2573
Email: OCR.Cleveland@ed.gov

Questions and complaints concerning other forms of discrimination in the educational or employment areas may be referred to the Civil Rights Coordinator and/or the United States Equal Employment Opportunity Commission:

**Civil Rights Coordinator**
Executive Director of Personnel Services
1375 S. Clare Ave.
Harrison, MI 48625
(989) 386-6692
lfassett1@midmich.edu

**United States Equal Employment Opportunity Commission**
Detroit Field Office
Patrick V. McNamara Bldg.
477 Michigan Ave.
Detroit, MI 48226
Telephone: (800) 669-4000; Facsimile: (313) 226-4610

**AMERICANS WITH DISABILITIES ACT**

Mid Michigan Community College is committed to providing an environment that is responsive and inclusive for people with disabilities. The College prohibits unlawful discrimination on the basis of disability and takes appropriate action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities equal access to admission, services, college courses, programs, activities, facilities, and technology.

Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act of 2008, states that any individual who has (1) a physical or mental impairment that substantially limits a major life activity, (2) has a record of having such an impairment, or (3) is regarded as having such an impairment, is protected under the law.

MMCC is not required to provide accommodations that would fundamentally alter an educational program, service, or activity. Nor is the College required to provide accommodations that would change academic requirements that are essential to a program of study or licensing requirement, or which would create an undue financial or administrative burden. MMCC must ensure that eligible students with disabilities receive reasonable and appropriate accommodations. In most cases, MMCC will require documentation of the disability and the necessity for requested accommodations.

The Office of Disability Services, located within Student Services on both the Harrison and Mt. Pleasant Campuses, oversees the coordination of reasonable accommodations for students with disabilities. Faculty and staff should contact the Office of Personnel Services for coordination of reasonable services and accommodations. Our goal is to ensure that individuals with disabilities and the rest of our college community will have a shared experience of enrichment and learning.
## NEW COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIM 100</td>
<td>Industrial Safety</td>
</tr>
<tr>
<td>AIM 105</td>
<td>Introduction to Advanced Integrated Manufacturing</td>
</tr>
<tr>
<td>AIM 110</td>
<td>Manufacturing Production Processes</td>
</tr>
<tr>
<td>AIM 115</td>
<td>Manufacturing Materials</td>
</tr>
<tr>
<td>AIM 120</td>
<td>Manufacturing Power &amp; Equipment Systems</td>
</tr>
<tr>
<td>AIM 125</td>
<td>Manufacturing Equipment Maintenance and Operations</td>
</tr>
<tr>
<td>AIM 130</td>
<td>Design for Manufacturing</td>
</tr>
<tr>
<td>AIM 135</td>
<td>The Manufacturing Enterprise</td>
</tr>
<tr>
<td>ART 207</td>
<td>Comic Book and Graphic Novel Illustration II</td>
</tr>
<tr>
<td>BIO 111</td>
<td>Fundamentals of Evolution and Diversity</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Fundamentals of Cell Biology</td>
</tr>
<tr>
<td>CIS 185</td>
<td>Introduction to Cybersecurity</td>
</tr>
<tr>
<td>CIS 231</td>
<td>.NET Programming II</td>
</tr>
<tr>
<td>CIS 285</td>
<td>Network Cybersecurity</td>
</tr>
<tr>
<td>ECE 160</td>
<td>Pediatric CPR/First Aid and Blood-borne Pathogens</td>
</tr>
<tr>
<td>MID 150</td>
<td>Career Readiness</td>
</tr>
<tr>
<td>NUR 101</td>
<td>Foundations in Nursing</td>
</tr>
<tr>
<td>NUR 102</td>
<td>Adult Health I</td>
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<tr>
<td>NUR 103</td>
<td>Mental Health Nursing</td>
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<tr>
<td>NUR 202</td>
<td>Adult Health II</td>
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<tr>
<td>NUR 203</td>
<td>Family Centered Nursing</td>
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<tr>
<td>NUR 204</td>
<td>Adult Health III</td>
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<tr>
<td>NUR 229</td>
<td>Capstone</td>
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## NEW PROGRAMS

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Program Name</th>
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<tbody>
<tr>
<td>AIM Certificate</td>
<td>Advanced Integrated Manufacturing</td>
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<tr>
<td>AIM Program</td>
<td>Advanced Integrated Manufacturing</td>
</tr>
<tr>
<td>AIM Training Credential</td>
<td>Advanced Integrated Manufacturing</td>
</tr>
<tr>
<td>CT Certificate</td>
<td>Computed Tomography Technology</td>
</tr>
</tbody>
</table>

## REVISED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 280</td>
<td>Accounting Internship</td>
</tr>
<tr>
<td>ALH 212</td>
<td>Clinical Procedures I</td>
</tr>
<tr>
<td>AMS 232</td>
<td>Automotive Internship</td>
</tr>
<tr>
<td>ART 105</td>
<td>Drawing I - Introductory</td>
</tr>
<tr>
<td>ART 115</td>
<td>Design I</td>
</tr>
</tbody>
</table>
ART 210  Illustration
ART 230  Painting II
BIS 260  BIS Internship
BUS 291  Business Internship
CIS 110  Programming Logic (Was titled Computer Programming I Visual Basics)
CIS 125  Database Systems (Was titled CIS 225)
CIS 131  .NET Programming I (Was titled Advanced Java Programming)
CIS 175  Computer Programming I (Was titled C++ Computer Programming)
CIS 275  Computer Programming II (Was titled C++ Computer Programming)
CIS 280  CIS Internship
DRF 250  Drafting Internship
HRA 285  HRA Internship
MAT 060  Math Study Skills
MAT 105  Intermediate Algebra
NUR 150  Pharmacology in Nursing
NUR 151  Assessment in Nursing
NUR 227  Leadership in Nursing
PHT 113  Orientation to Institutional Pharm Pract
PHT 114  Pharmacology for Pharmacy Technicians (Add BIO 120 as a course prereq to PHT.114)
PLT 180  Plastics Internship
PTA 106  Modalities I Lab
PTA 110  Therapeutic Exercise
PTA 111  Therapeutic Exercise Lab
PTA 130  Advanced Therapeutic Exercise
PTA 131  Advanced Therapeutic Exercise Lab
PTA 140  Clinic I
PTA 206  Modalities II Lab
PTA 207  Rehabilitation Techniques
PTA 208  Rehabilitation Techniques Lab
PTA 240  Clinic II
RAD 100  Introduction to Radiologic Technology
RAD 113  Radiation Biology (Change course number from RAD 215 to 113 and move from the fourth semester to the first)
RAD 180  Clinical Education I
RAD 180  Clinical Education I
RAD 221  Clinical Issues in Radiography II
## REVISED PROGRAMS

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Information Systems</td>
<td>Three tracks reduced to two; several course changes.</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>Social Science requirement changed from 9 credits to 6 (HES 100 and SSC 200); 3 credits added to elective requirement; ECE 160 added to elective list</td>
</tr>
<tr>
<td>Graphic Design</td>
<td>Graphic Design Program (Added ART 207 as an Elective to the Graphic Design Program)</td>
</tr>
<tr>
<td>Nursing</td>
<td>Nursing Program (Remove BIO 210 as a prereq; add as highly recommended. Also, several course changes.)</td>
</tr>
<tr>
<td>Pharmacy Technician</td>
<td>Pharmacy Technician Program (Remove BIO 120 as a prerequisite for the PHT program)</td>
</tr>
<tr>
<td>Radiography</td>
<td>Radiography Program (Changed RAD 213 to RAD 113; moved from the 4th semester to the 2nd)</td>
</tr>
<tr>
<td>Visual Arts</td>
<td>Visual Arts Program (Added ART 207 as an Elective to the Visual Arts Program)</td>
</tr>
</tbody>
</table>

## CANCELLED PROGRAMS

<table>
<thead>
<tr>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Technology</td>
</tr>
</tbody>
</table>