Equal Opportunity
Muskegon Community College continues to promote staff diversity, and is an equal opportunity employer. MCC does not discriminate on the basis of race, color, religion, sex, national origin, marital status, sexual orientation, gender identity, transgender status, political persuasion, disability, height, weight, veteran status, age or any other protected class in any of its educational programs, activities or employment. Minorities, women, veterans, and the physically challenged are encouraged to apply. Anyone with a disability will be reasonably accommodated by the College. If you have a disability and need an accommodation or assistance in applying for this position, please contact the Human Resources Office.

This catalog is for informational purposes only and is not to be considered a binding contract between Muskegon Community College and individual students.

Information in this catalog was accurate as of April 2023 and is subject to change without notice. This publication - which details policies, procedures, rights, responsibilities, programs and course descriptions - is intended to be used along with MyMCC and the schedule that is published each semester to provide current information on registration and course offerings.
Congratulations and Welcome to Muskegon Community College!

Congratulations and welcome to Muskegon Community College (MCC), the best place to achieve your goals and pursue your dreams. Whether you attend MCC in Muskegon, Newaygo, or Ottawa counties, or take classes online, you will enjoy working with people who have a laser-like focus on your success. Our highly qualified faculty members are experts in their programs and are committed to successfully preparing you for your future.

MCC offers classes at times that fit your schedule, including evening and online courses. We offer over 80 programs of study to earn an Associate in Applied Science (AAS), Associate in Science (AS), Associate in Arts (AA) degree, or certificates of completion as well as numerous personal enrichment/continuing education courses. Our programs will get you ready for university transfer, prepare you to enter the workforce, or advance your career.

Enjoy the beauty and high-quality learning environments on our main campus with our state-of-the-art Science Center, Health and Wellness Center, Automotive Center, and Art and Music Building, or gain hands-on technical experience in our downtown Sturrus Technology Center.

Not only does MCC provide a high quality and affordable education, but we also offer many innovative learning experiences including study abroad. I encourage and invite you to participate in the many activities we offer, such as athletics (including esports), student clubs, student government, art, theater, music, and other campus events.

Use this catalog, as well as our website at www.muskegoncc.edu, for additional online resources to assist you. Our faculty and staff are also here to provide guidance and support along the way to help you reach your educational and professional goals.

Take the first step today by calling us at 231-773-9131, or explore our video viewbook at www.mccyoucan.org. We appreciate your interest in MCC and look forward to working with you to achieve your goals.

Sincerely,

John Selmon
Dr. John Selmon, President
Muskegon Community College
Introduction
Aspiring To Be The Best, Muskegon Community College’s five-year Strategic Plan, focuses on increasing access to higher education, improving equity, and becoming an excellent place to learn and grow. Students come to MCC for many reasons: to finish an associate degree and transfer to a four-year university, to complete a certificate or degree to enter the workforce, to build skills for career advancement, to enrich the experience of high school, to engage in learning for the joy of learning, and, sometimes, to explore varies career paths. Whatever your reason for choosing MCC, please know that you, your goals, and your MCC experience are vitally important to us. We have many educational and career pathways, and we have many people and services in place to help you select the one that is best for you, support you as you start and stay on your path, and celebrate with you as you complete important milestones. Every member of the MCC community, from facilities staff to the college president, will be rooting for you when times get tough, when things are going well, and when you have accomplished all you came to do at MCC. Located near the shores of Lake Michigan, MCC is a vital part of a growing community, providing learning opportunities on our main campus, at our Sturrus Technology Center in downtown Muskegon, our Ottawa Center in Grand Haven, and at our off-campus locations in Ottawa and Newaygo Counties. MCC also offers many online and hybrid classes, with synchronous and asynchronous options.

Accreditation
Muskegon Community College is accredited by the Higher Learning Commission, 230 S. LaSalle Street, Suite 7-500, Chicago, Illinois, 60604. The Commission may be contacted by phone, (800) 621-7440, by fax, (312) 263-7462, or by email, info@hlcommission.org. They may also be contacted online at www.hlcommission.org. Interested persons may review a copy of the accreditation documents online at www.muskegoncc.edu/academic-affairs/accreditation.

Our Mission at Muskegon Community College
Muskegon Community College, dedicated to equity and excellence, prepares students, builds communities, and improves lives.
# Table of Contents

## INTRODUCTION
- MCC Mission Statement ................................................................. 3
- Introduction .................................................................................. 3

## RESOURCES AT MCC
- About Us .................................................................................... 10
- Admissions .................................................................................. 12
- Barnes & Noble Bookstore ............................................................. 28
- Campus Facilities ......................................................................... 34
- Career and Transfer Services ....................................................... 25
- Carr-Fles Planetarium .................................................................. 34
- College Success Center ................................................................. 22
- Counseling and Advising Center .................................................. 16
- Disability Support Services .......................................................... 24
- Financial Aid ................................................................................. 18
- Golf Course .................................................................................. 35
- Hendrik Meijer Library and Information Technology Center .......... 26
- Honors Program ........................................................................... 21
- International Study Programs ....................................................... 21
- MCC Jayhawk Athletics ................................................................. 33
- Office of Information Technology ................................................ 27
- Parking Permits ............................................................................ 35
- Phi Theta Kappa ........................................................................... 22
- Resources ..................................................................................... 15
- Services for the Community ......................................................... 37
- Student Housing Resources .......................................................... 26
- Student Life .................................................................................. 31
- Testing Center .............................................................................. 17
- Tutoring Services ......................................................................... 23
- Vending Services .......................................................................... 36
- Veterans Office ............................................................................. 29

## PROGRAMS
- Allied Health Programs ................................................................. 83
- Applied Technology Programs ..................................................... 142
- Art Pathway ................................................................................... 64
- Associate in Applied Science Degrees ........................................... 82
- Associate in General Studies Degree ............................................. 183
- Associate in Science and Arts (ASA) ............................................. 52
- Biology Pathway ........................................................................... 66
- Business Pathway .......................................................................... 68
- Communications Pathway ............................................................. 70
- Criminal Justice Pathway .............................................................. 72
- Education Programs ..................................................................... 136
- Exercise Science Pathway ............................................................. 74
- Higher Education Partnership Programs ...................................... 184
- Professional Truck Driver Training .............................................. 186
- Programs Table of Contents ........................................................ 46
- Purpose of General Education ...................................................... 49
- MCC Academic Degrees and Certificates .................................... 51
- Mechanical Engineering Pathway ............................................... 82

4 - 2023 - 2024 Muskegon Community College Catalog
# Course Descriptions

Michigan Transfer Agreement ................................................................. 53
Psychology Pathway .............................................................................. 76
Public Health Pathway ............................................................................ 78
Social Work Pathway ................................................................................ 80

## COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>189</td>
</tr>
<tr>
<td>Allied Health</td>
<td>190</td>
</tr>
<tr>
<td>Alternative and Renewable Energy</td>
<td>191</td>
</tr>
<tr>
<td>American Sign Language</td>
<td>191</td>
</tr>
<tr>
<td>Anthropology</td>
<td>192</td>
</tr>
<tr>
<td>Applied Manufacturing Technology</td>
<td>192</td>
</tr>
<tr>
<td>Art</td>
<td>193</td>
</tr>
<tr>
<td>Astronomy</td>
<td>196</td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>198</td>
</tr>
<tr>
<td>Biology</td>
<td>200</td>
</tr>
<tr>
<td>Business</td>
<td>205</td>
</tr>
<tr>
<td>Business and Technical Communications</td>
<td>210</td>
</tr>
<tr>
<td>Chemistry</td>
<td>210</td>
</tr>
<tr>
<td>College Success Seminar</td>
<td>212</td>
</tr>
<tr>
<td>Communications</td>
<td>213</td>
</tr>
<tr>
<td>Computer-Aided Drafting and Design</td>
<td>214</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>215</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>223</td>
</tr>
<tr>
<td>Dance</td>
<td>226</td>
</tr>
<tr>
<td>Digital Music</td>
<td>227</td>
</tr>
<tr>
<td>Economics</td>
<td>228</td>
</tr>
<tr>
<td>Education</td>
<td>228</td>
</tr>
<tr>
<td>Education-Related</td>
<td>233</td>
</tr>
<tr>
<td>Electricity</td>
<td>233</td>
</tr>
<tr>
<td>Electronics</td>
<td>235</td>
</tr>
<tr>
<td>Engineering</td>
<td>236</td>
</tr>
<tr>
<td>English</td>
<td>237</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>240</td>
</tr>
<tr>
<td>Food Science</td>
<td>241</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>241</td>
</tr>
<tr>
<td>French</td>
<td>241</td>
</tr>
<tr>
<td>Geography</td>
<td>242</td>
</tr>
<tr>
<td>Geology</td>
<td>243</td>
</tr>
<tr>
<td>German</td>
<td>244</td>
</tr>
<tr>
<td>Graphic Design</td>
<td>245</td>
</tr>
<tr>
<td>Graphic Reproduction</td>
<td>246</td>
</tr>
<tr>
<td>Health Education</td>
<td>247</td>
</tr>
<tr>
<td>History</td>
<td>248</td>
</tr>
<tr>
<td>Humanities</td>
<td>250</td>
</tr>
<tr>
<td>Hydraulics/Pneumatics</td>
<td>250</td>
</tr>
<tr>
<td>International Cultural Studies</td>
<td>250</td>
</tr>
<tr>
<td>Machining Technology</td>
<td>251</td>
</tr>
<tr>
<td>Management</td>
<td>252</td>
</tr>
<tr>
<td>Marketing</td>
<td>252</td>
</tr>
<tr>
<td>Materials Technology</td>
<td>253</td>
</tr>
</tbody>
</table>
## Table of Contents

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>254</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Assistant</td>
<td>258</td>
</tr>
<tr>
<td>Music</td>
<td>259</td>
</tr>
<tr>
<td>Nursing</td>
<td>264</td>
</tr>
<tr>
<td>Philosophy</td>
<td>266</td>
</tr>
<tr>
<td>Physical Education - Activity</td>
<td>268</td>
</tr>
<tr>
<td>Physical Education - Professional</td>
<td>271</td>
</tr>
<tr>
<td>Physical Science</td>
<td>271</td>
</tr>
<tr>
<td>Physics</td>
<td>272</td>
</tr>
<tr>
<td>Political Science</td>
<td>273</td>
</tr>
<tr>
<td>Psychology</td>
<td>274</td>
</tr>
<tr>
<td>Reading</td>
<td>275</td>
</tr>
<tr>
<td>Recreation</td>
<td>276</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>277</td>
</tr>
<tr>
<td>Sociology</td>
<td>279</td>
</tr>
<tr>
<td>Spanish</td>
<td>280</td>
</tr>
<tr>
<td>Sports Officiating</td>
<td>282</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>282</td>
</tr>
<tr>
<td>Technical Math</td>
<td>286</td>
</tr>
<tr>
<td>Technology</td>
<td>287</td>
</tr>
<tr>
<td>Theater</td>
<td>288</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>290</td>
</tr>
<tr>
<td>Women’s Studies</td>
<td>292</td>
</tr>
</tbody>
</table>

### POLICIES & PROCEDURES

| Academic Classroom Conduct                                                | 329 |
| Academic Probation                                                         | 299 |
| Audit Policy                                                              | 301 |
| Campus Safety and Security                                                 | 335 |
| Computer Usage Policy                                                      | 330 |
| Confidentiality of Records                                                | 315 |
| Crime Statistics                                                          | 335 |
| Disclosure of Educational Records                                          | 316 |
| Directory Information                                                     | 317 |
| Dress Code                                                                | 337 |
| Drop/Withdrawal Policy                                                     | 302 |
| Drug-free Campus                                                          | 337 |
| Email Policy                                                              | 332 |
| Enforcement Procedure                                                     | 332 |
| Equal Opportunity, Harassment, and Nondiscrimination Policy                | 333 |
| False Alarm(s)                                                            | 335 |
| Final Grade/Attendance Appeals                                             | 319 |
| Financial Aid Contract                                                    | 306 |
| First Aid and Emergencies                                                 | 336 |
| Freedom of Expression                                                     | 338 |
| General Academic Policies                                                 | 296 |
| General Student Complaints                                                | 334 |
| Institutional Governance for Internal Communication                       | 318 |
| Non-Disclosure Form                                                        | 317 |
| Petitions Committee                                                       | 319 |
Table of Contents

Refund Policy ........................................................................................................................................ 305
Registration Information ......................................................................................................................... 299
Residency Change Appeals ....................................................................................................................... 320
Reverse Transfer ..................................................................................................................................... 313
Right-to-Know .......................................................................................................................................... 317
Satisfactory Academic Progress (SAP) ..................................................................................................... 307
Schedule of Refund Days ............................................................................................................................ 305
Student Code of Conduct .............................................................................................................................. 323
Student Conduct Policies ............................................................................................................................ 338
Tobacco/E-Cigarette Free Environment ...................................................................................................... 337
Transcripts .................................................................................................................................................. 314
Transferring Credit to MCC ....................................................................................................................... 309
Tuition and Contact Hour Charge Rates ..................................................................................................... 304
Tuition, Fees and Payment ............................................................................................................................ 303
Tuition Refund Appeals ............................................................................................................................... 320
Weapons Policy .......................................................................................................................................... 336
Wireless Computer Access Policy ............................................................................................................. 331
RESOURCES AT MCC
History of Muskegon Community College

About Us

The fourth oldest community college in Michigan, Muskegon Junior College was established in 1926 by the Muskegon Board of Education.

Originally housed in Muskegon Senior High School, enrollment had grown beyond capacity by 1934. The Junior College moved into the former Hackley School in downtown Muskegon across from Hackley Park. The building was presented to Muskegon Public Schools by its namesake, local businessman and philanthropist Charles H. Hackley.

Post-World War II enrollment quickly climbed, and the campus had to grow accordingly. The Muskegon Board of Education, which still operated the College, utilized available space in many of its buildings and rented other community facilities when enrollment exceeded the capacities of those buildings.

Until June 1951, Muskegon Junior College was primarily geared to those students intending to complete at least four years of college. After an enabling act by the Michigan Legislature, the name and educational scope of the College changed. Muskegon Junior College was renamed Muskegon Community College to reflect the expanded nature of the College’s programs.

The College now served a larger number of students with a wider variety of interests. Courses were added in retailing, the vocations, the technical fields, public health, and the trades. These courses enabled young men and women to prepare themselves for a specific field of employment with their two years of training beyond high school.

By the early 1960s, enrollment had topped 2,000. The College was operating full-time at Hackley, Vanderlaan, and Wilson schools and part-time at eight other locations. The Board of Education formed a Special Citizens Committee to study the entire program and make recommendations. The Committee proposed that the College be separated from the public school system; that a county-wide community college district be created and a board of trustees be elected to plan, build, and operate the school; and that a millage be voted in sufficient amount and for enough years to build and operate the College.

In April 1963, Muskegon County overwhelmingly approved the recommendations of the committee and elected the first Board of Trustees, which went to work immediately and by September had purchased the tract of land upon which the College exists today.

Alden B. Dow and Associates was named as the architect. By the summer of 1965, drawings were completed and construction had begun. The Vocational Technical Wing was finished and occupied in the fall of 1966. The following September the entire complex was placed in service. Formal dedication ceremonies were held October 22, 1967.

The first addition to the new campus was the Frauenthal Foundation Fine Arts Center, which was completed in 1968 and named for A. Harold Frauenthal, the Muskegon industrialist whose gift made the Center possible.

When the new district was created, the name of the College was changed to Muskegon County Community College. In the spring of 1969, at the request of the Board of Trustees, the State Board of Education approved changing the name once again to Muskegon Community College.

In January 1995, a new era of educational opportunity opened with the completion of the Center for Higher Education addition to provide upper-level courses and programs offered by Ferris State, Grand Valley State, and Western Michigan universities. The 90,000 square foot facility, named in honor of former MCC President James L. Stevenson, is home to classrooms, a lecture hall, MCC-TV, Graphics and Printing.

In January 2006, the 40,000 square foot Hendrik Meijer Library Information Technology Center was added to the main building to offer students and the community the latest in communication capabilities, including wireless internet access, state-of-the-art library facilities/technologies and classrooms, and an internet café.
In 2012, MCC and the Muskegon Area Intermediate School District (MAISD) launched the Early College of Muskegon County offering select high school students an intense five-year program leading to both a high school diploma and an associate degree. The concept was expanded and MCC offered Early College of Newaygo County, North Ottawa County Early College and South Ottawa Early College.

In November 2013, Muskegon voters approved $24 million to support four MCC facilities expansion projects outlined in the College’s 2010-2015 Master Plan. MCC signed a purchase agreement in September 2014 to acquire the former Muskegon Chronicle building and an adjacent parking lot for a downtown campus. In December 2017, the Peter and Carolyn I. Sturrus Technology Center opened as the new home to MCC’s Applied Technology programs as well as to MCC’s Experiential Learning Program.

In June 2015, local developer Jonathan Rooks donated the former Masonic Temple to MCC for its Entrepreneurial Studies program and related business-generating activities. Nick Sarnicola, a West Michigan native and highly successful entrepreneur, created a $200,000 permanent endowment through his Next Gen Foundation to the Foundation for Muskegon Community College. The funds support an annual $10,000 cash award for the best business idea generated by an MCC entrepreneurial program graduate. The Rooks-Sarnicola Entrepreneur Institute opened in June 2018 and is home to the Lakeshore Fab Lab.

In August 2015, MCC opened its $9.6 million Science Center, home to the MCC Life Sciences Department and the College’s biology labs and research areas. The facility earned the Leadership in Energy and Environmental Design (LEED) Gold Certification - one of only four buildings in Muskegon to have received this high honor – for its sustainable strategies used in its design and construction.

The same year, MCC purchased the Muskegon Family YMCA’s West Western Avenue property on Muskegon Lake. The former YMCA facility was re-opened in 2016 as the MCC Lakeshore Fitness Center. In February 2021, the Boys & Girls Club of the Muskegon Lakeshore Board of Directors voted unanimously to approve the purchase of the Lakeshore Fitness Center as the new home for its youth and teen Clubhouse.

In November 2018, the 52,000 square foot MCC Health and Wellness Center opened on the main campus. The facility houses the College’s Health, Physical Education and Recreation Department; the Medical Assistant Program; the Athletic Department Office; a state-of-the-art Health Simulation Lab; the Ron Gaffner Multipurpose Room; a gymnasium; a running track; and a fitness center. The Mercy Health Partners Primary Care Center, a collaboration between MCC and its Mercy Health and Grand Valley State University educational partners, is also located there.

In August 2019, the $9 million renovation project that transformed the vacated Applied Technology Building into a state-of-the-art Art and Music Building was completed.

Building upon its more than two decades of offering classes in Grand Haven, MCC opened its Ottawa Center there in 2019. The College also offers courses in Ottawa County in Holland and Coopersville, and in Newaygo County at NCRESA.

MCC earned acclaim as a national trailblazer in student success as an Achieving the Dream (ATD) Leader College from 2015 to 2021. MCC was named the top-ranked Michigan community college in 2017 by BestColleges.com for its gainful employment, graduation rates, and earnings outcomes.

In 2021, MCC was ranked as the 19th best community college in the United States and best choice nationally for community college nursing programs by Intelligent.com. MCC has earned acclaim as a national trailblazer in student success as an Achieving the Dream Leader College.

In 2023, MCC was recertified as an ATD Leader College. MCC is also consistently recognized as a Veteran-Friendly School by the Michigan Veterans Affairs Agency and for its Licensed Practical Nurse (LPN) program.
Admissions

As an “open door” institution, Muskegon Community College welcomes applications from all who wish to attend. The information requested on the application is used solely to help us serve your educational needs more effectively.

Admission to the College does not guarantee admission to all courses and programs within the College. The special admission requirements to certain courses and programs may be obtained from appropriate sections of this catalog or by inquiring at the departmental office in question.

Students wishing to enter the Nursing, Nurse Aide, Medical Assistant or Respiratory Therapy programs must submit additional applications. Applications for these programs may be obtained through meeting with an MCC counselor.

Orientation

Orientation is mandatory for all MCC students, including transfer students. Early College students please speak with your Dean or Mentor regarding how to satisfy your orientation requirement. Studies have shown that students who attend orientation attain higher GPA’s and successfully complete more credit hours than those who do not attend. Orientation videos can be found at www.muskegoncc.edu/orientation.

During orientation you will learn about the registration and financial aid processes, what resources are available to you and how to take advantage of those. You will also learn about your rights and responsibilities as a student, MyMCC, MCC email, and Blackboard.

Change of Name or Address

You should promptly notify the Student Welcome Center of any change in name or address that occurs while you are enrolled at the College. Name changes must be made in person. Legal proof of name change is required (drivers license, marriage license, social security card, voter registration card).

Student ID/My MCC OneCard

Photos for the Student ID/MyMCC OneCard can be taken in the Information Commons located on the second floor below the Hendrik Meijer Library, or you can send a photo to photoid@muskegoncc.edu. The MyMCC OneCard serves as the student’s official student ID, library card and method for receiving an electronic disbursement of financial aid and tuition refunds. The student has the option of having their refund deposited in an existing account at a bank of their own choosing or the student can have their refund deposited in a BankMobile account, the company that we have partnered with to process our refunds. If the student chooses to have their refund deposited into their own bank account, then the card only acts as a student ID and library card. If the student chooses to open a BankMobile Vibe checking account then the MyMCC OneCard will act as a debit card (it is NOT a credit card).

For more information on the “MyMCC OneCard” visit www.mymcconecard.com.

Full-time Student

If you are enrolled for 12 or more credit hours per semester, you are considered a full-time student. Note, however, earning the associate degree (62 credits) in four semesters will mean carrying an average of 15 ½ credit hours per semester. If you wish to graduate in two years you must carry more than the 12 credit hours each semester or plan on attending Summer sessions.

Part-time Student

If you are carrying fewer than 12 credit hours per semester you will be a part-time student. If you are enrolled for 9-11 credit hours per semester, you are classified as “three-quarter” time, and 6-8 credit hours per semester you are a “half-time” student. If you are applying for financial aid as a part-time student, you should consult the Financial Aid Office for details on just how much help is available to you each semester.
Regular Admission
If you are seeking admission to Muskegon Community College, applications are available online at www.muskegoncc.edu. Submit official high school or GED transcript and include ACT, SAT and/or MME scores. It is free to apply!

Apprentice Student
Apprentice students need to complete the application as a community guest student. Regulation of the number of apprentices in any trade is a negotiated item in labor contracts or is set by the Bureau of Apprenticeship and Training. It is not a decision of the College.

Transfer Student
If you attended another institution and plan to transfer credits to Muskegon Community College please complete the online application as a transfer student and have all official transcripts forwarded for evaluation. All College transcripts must be sent directly to MCC. MCC will not accept transcripts hand delivered. Transfer students who wish to receive a degree from Muskegon Community College must complete no less than 30 or the last 15 hours at MCC and attain a 2.0 or better overall grade-point average. Transcripts should be sent for evaluation directly to:
Transfer Evaluation, Room 1048H
Muskegon Community College
221 S Quarterline Rd
Muskegon, MI 49442

High School Guests/
Dual Enrollment Admission
High school students may be permitted to enroll as guests while still enrolled in high school. They must first submit an MCC online application identifying themselves as a high school guest, send a high school transcript with ACT, SAT and/or MME scores to MCC’s Admissions Office, and complete a dual enrollment approval form; www.muskegoncc.edu/dualenrollment.

A dual-enrolled student may have to complete Placement Testing. Please look at course prerequisites to determine if Placement Testing is required. Interested students should contact their high school principal or counselor for further information.

College Guest Admission
Students attending other colleges or universities within the state may be admitted as guests by filing a Michigan Uniform Undergraduate Guest Application in addition to the online application. Guests should develop a program of study with an advisor at their home institution to insure proper course selection and credit transfer. College Guest status must be renewed each semester. Please follow the following steps to ensure an effortless college guest experience:

1. Apply for admission, and the Michigan Uniform Undergraduate Guest Application.
2. Complete Part I of the Michigan Uniform Undergraduate Guest Application by printing clearly or typing, then signing the application.
3. Ask an official at your current institution to complete Part II and submit the application to MCC’s office.
4. Consult your advisor at your primary institution to ensure appropriate course selection to meet your transfer requirements.
5. Register and pay for classes. Guest students pay all tuition and fees, they do not qualify for financial aid.
6. Request an official transcript be sent to your home institution after completion of the class.

Community Guest Admission
If you have not completed high school or the GED, or wish to take selected courses without the intent of earning a degree, diploma, or certificate, you may be admitted as a Guest (non-degree) applicant. As a Guest student you will be eligible to change to regular admission status upon submitting your high school transcript, GED test scores or appropriate test results to the Office. It is your responsibility to initiate the change to regular admission status.

Returning Students
The following information is designed for students who have not attended MCC within the last three years or have earned a degree or certificate from Muskegon Community College (someone who does not have an active program code). You will need to complete the following information:
Residency Policy
Determination of residency status is governed by the following:

- To qualify as an in-district resident, you must have lived within the confines of Muskegon County for six consecutive months prior to the first day of classes for any semester.
- To qualify as an out-of-district resident, you must have lived within the confines of the State of Michigan for six consecutive months prior to the first day of classes for any semester. If you have previously registered as a non-resident you may change to in-district resident status upon satisfying the requirements above. When recently married you shall be deemed an in-district or Michigan resident if your spouse satisfies the requirements above. Initial residency status shall be determined by the Office of the Registrar.

It is your responsibility to notify the Student Welcome Center, prior to the first day of classes for any semester, of any change in residence that would affect your residency classification. THE BURDEN OF PROOF LIES WITH YOU, THE STUDENT. The above applies only to American citizens, permanent residents and refugees. Required documentation is listed below. All documentation must have the address and required dates listed.

Michigan Driver’s License OR
State-issued I.D. AND
One of the following:
- Voter’s registration
- Vehicle registration
- Vehicle insurance
- Property tax receipt
- Property lease
- Utility bill
- Notarized verification from an in-district or Michigan resident stating that you have resided with him/her/them for at least six months prior to the start of the semester.

Residency Status for Veterans, Military Personnel, and Eligible Dependents
Residency is based on the location of the present domicile of the applicant with the six-month requirement waived if the applicant can provide any of the following documents. This waiver is extended to the dependents (spouse and children) of the person named on the Department of Defense 214 or 899 who reside at the same address, or to dependents who do not reside at the same address but are identified as a dependent per VA Benefit guidelines. Students seeking a military veteran residency waiver need not have lived in Michigan prior to military service.

Student shall provide one of the following:
- Department of Defense 214, Separation from Active Duty Form
- Department of Defense 899, Change of Station Form, showing the Muskegon area as the duty station;
- Department of Defense 899, Change of Station Form, showing a change of duty station for the head-of-household to an overseas destination or as the result of an emergency mobilization.

Eligible dependents can show relation through birth certificate, marriage license, VA benefit eligibility letter, or other official document dependent on verification by an MCC official.

Additionally, the following individuals shall be charged in-state tuition:
Any individual using educational assistance under either Chapter 30 (Montgomery GI Bill® – Active Duty Program), Chapter 31 (Vocational Rehabilitation), Chapter 33 (Post-9/11 GI Bill®), Chapter 35 (Dependents Educational Assistance),
or Chapter 1606 (Montgomery GI Bill® – Select Reserve), 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 Muskegon Community College (regardless of his/her formal state of residence).

**International Student Enrollment**

International students that would like to be considered for enrollment at MCC must complete an International Student Application which may be found at www.muskegoncc.edu/international-students/. Official translated high school transcripts, bank statement, and TOEFL scores must also be submitted before an admission decision is made. Additional information can be obtained by calling (231) 777-0599.

**Senior Citizen Tuition Waiver Policy**

Any legal resident of Muskegon County, 60 years of age or older before the first day of the semester in which admission is sought, is eligible to receive a Senior Citizen Tuition Waiver. Interested senior citizens must: present a valid Michigan Driver’s license or State ID to the Student Welcome Center for verification; meet all MCC admission requirements; and meet all course requirements, which may include placement testing. Senior citizens may register as degree seeking or auditing (non-credit seeking) students in courses on a space-available basis without payment of tuition. However, students will be responsible for the cost of supplies, course fees, registration fee, technology fee, and infrastructure fee. If degree seeking, students using the Senior Citizen Tuition Waiver must meet the MCC degree requirements and are recommended to attend New Student Orientation.

The Senior Citizen Tuition Waiver does not cover secondary admit programs, including Medical Assistant, Nursing, and Respiratory Therapy. This waiver cannot be applied retroactively; verifying documentation must be presented to the Student Welcome Center prior to the first day of the semester in which admission is sought.

**Resources**

**Your Educational Success**

The goal in higher education is not only what you learn, but how you learn it – to go beyond rote memorization and into a full understanding of the subject at hand. To help in this process, MCC has a multitude of resources including academic, career, and personal counseling; tutoring; College Success Center; services for students with special needs; career assessments and many others. Take advantage of any or all of these services to make sure your education is well-rounded and successful.

There are many ways to maximize your learning potential as you start your college education. MCC recommends the “College Success Seminar (CSS 100A)” as a start-up course to help you develop the necessary skills, abilities, attitudes and behaviors that provide academic and personal success.

**Care Report and Care Team**

The Care Report is a support system designed to ensure student success at MCC. Please pay attention to these emails and consider taking the actions they recommend – they are intended to help you succeed! Your instructor may submit a Care Report, and you will then be contacted by a member of the Care Team or Tutoring Services. The purpose of this system is to get you the help you need, when you need it. Care Team members are available via email, video, and phone for all students at MCCCareTeam@muskegoncc.edu or (231) 777-0216. Students can also submit a Student Care Report when help is needed on MyMCC by clicking on the Care Report button and completing the form.

**Debt Forgiveness Program**

This program is available to certain former students who are not able to enroll due to an outstanding financial obligation to MCC. Students must meet the following criteria to be eligible:

- not enrolled at MCC for three or more academic years;
- have outstanding debt to MCC of no more than $1,200;
- possess and, if accepted, maintain a 2.0 GPA;
- commit to ongoing support services designed to help them achieve their academic goals;
- have a completed FAFSA on file; and

2023 - 2024 Muskegon Community College Catalog - 15
• have the means to pay current charges

Students who agree to this contract and fulfill it will have their past due balance reduced incrementally over three semesters. The application submission does not guarantee acceptance into the MCC Debt Forgiveness Program. For more information and to apply to the program visit www.muskegoncc.edu/financial-services/debt-forgiveness-program/.

Counseling and Advising

Room 1050 • www.muskegoncc.edu/counseling

Counseling is available in the Counseling and Advising Center, Room 1050 and virtually via zoom. Muskegon Community College’s counseling faculty offers a wide variety of educational, career, and personal counseling services.

Academic advising provided by MCC counselors is especially important as you work through a pathway that aligns with your personal career goals and abilities. MCC offers six pathways for students to choose from:

1. Arts, Humanities & Communication
2. Engineering/Manufacturing and Industrial Technology
3. Health Services
4. Human Services
5. Business & Information Technology
6. Math & Science

Counselors have specific pathways in which they advise, so please specify your pathway of interest when setting up an appointment. If you are an undecided student, you may set up an appointment with any of the counselors. Counselors will work with you to create an educational map to assist you in reaching your educational and vocational goals. Counselors work closely with academic departments and transfer colleges to help advise you on the best course selections for your program. If you plan to transfer after your degree at MCC, it is strongly encouraged you meet with a counselor each semester, because suggested courses will vary with each college/university.

Our Licensed Professional Counselors can assist you in exploring your interests, and values, and how these help build a foundation for career exploration. Educational and personal counseling can help you adjust to a new academic environment and resolve problems that may interfere with success at Muskegon Community College.

Counselors provide free, confidential and professional mental health counseling services, resources, and referrals to support the academic and personal success, health, and well-being of our students. Students often visit the Counseling and Advising Center to discuss a wide variety of topics that include, but aren’t limited to: depression, anxiety, relationship concerns, stress management, suicidal ideation, indecision about a major or career path, academic concerns such as failing grades or struggling with a subject.

Beyond individual services, the Counseling and Advising Center offers a variety of workshops, presentations, and activities supporting wellness and health promotion.

Counselors are available, by appointment, Monday through Friday. Appointments may be made in Room 1050 or by calling (231) 777-0362. Current Muskegon Community College students can log into MyMCC and self-schedule appointments.

Express Counseling and Advising is available Monday through Thursday. Express Counseling and Advising is intended for immediate concerns that can be resolved in a 5-10 minute conversation. If you would like to speak with a counselor regarding academic advising and course planning, you must make a counseling appointment. However, counselors will assist students via Drop-ins with Extended Services prior to each semester. The virtual drop-in hours and zoom link can be found at https://www.muskegoncc.edu/drop-in. Contact the Counseling and Advising Center for hours. The office hours are posted on our website www.muskegoncc.edu/counseling.
Testing Center

Room 1032 • www.muskegoncc.edu/testing

Services
The Testing Center provides the following testing services for students, faculty and guests: placement and waiver tests, make-up tests, online tests, independent study examinations, proctoring services for distance learning programs and CLEP testing. The Testing Center is located in Room 1032 or you may call (231) 777-0394 or email testingcenter@muskegoncc.edu.

Fees
With the exception of CLEP testing and, in some cases, external exam proctoring, testing services are free of charge to MCC students.

Fee schedule for tests with associated fees:

• Exams for other institutions: $25 charged for test takers without an MCC student ID number or MCC students who have earned less than 50 credit hours from MCC

• Placement tests for other institutions: $25

• CLEP tests: $25 proctor fee plus Collegeboard test fee. See clep.collegeboard.org/register for current test fee information

Course Placement
MCC uses a guided self-placement process to help students determine where to begin with math and English courses at the College. To view current placement guidelines and resources, visit www.muskegoncc.edu/course-placement.

Nursing, Respiratory Therapy, Dual Enrollment and Early College Program participation may require students to take MCC Placement tests.

Many courses have skill level prerequisites; meet with a counselor to be sure you are enrolling in the appropriate class.
Financial Aid

Muskegon Community College, through its financial aid programs, attempts to assist students who would not otherwise be able to pursue their educational goals. Numerous federal and state programs, as well as College-sponsored and privately funded programs are available to assist qualified students. Most of these programs are described in the following paragraphs.

Students must meet the criteria for particular programs, be in good academic standing, and make normal progress toward a degree in order for funds to be awarded or renewed.

Federal regulations require that, in order for an award to be renewed under a federal program, the student must not owe a repayment on a previous loan or grant. The College also reserves the right to withhold all services—including the issuing of academic transcripts—from any students who have not met their financial obligations to the College.

Applications, Procedures and Deadlines

In order to be considered for financial assistance, students must do the following:

1. Be accepted for admission to the College as a regular student (new students must submit a completed Application for Admission online at www.muskegoncc.edu).
2. Complete and submit a FAFSA (Free Application For Federal Student Aid). Request that a copy be sent to Muskegon Community College (College Code #002297). This is required for all aid programs based on financial need. See https://studentaid.gov for more information.
3. Immediately respond to any requests. Additional documentation, including signed copies of Federal tax returns, may be needed to complete your financial aid file.

In order to receive full consideration for financial assistance, completed applications must be on file at the College by the following dates:

- for FALL SEMESTER: May 1
- for WINTER SEMESTER: October 1
- for SUMMER SESSION: March 1

Applications received after these dates will be considered on a first-come, first-served basis, if funds are available.

Most financial aid is awarded for only one academic year at a time. Students must submit new applications in order to receive consideration in a subsequent year.

Federal Programs

Pell Grant

Pell Program grants are available to students in financial need. Grants range from $692 to $6,895. The actual amount of each grant depends upon the student's eligibility number and the number of credit hours being carried each semester. Students attending Summer Semester are allowed to receive Federal Pell Grant funds up to 150 percent of the student's Pell Grant Scheduled Award for an award year. Awards are prorated according to the number of credit hours carried:

1-5 credits.................................less than1/2 time award
6-8 credits.................................1/2 time award
9-11 credits.................................3/4 time award
12+ credits................................full-time award

Students apply for a PELL Grant by completing the Free Application for Federal Student Aid (FAFSA).

Supplemental Education Opportunity Grant (SEOG)

The SEOG Program funds are available to students with exceptional financial need which has not been met through other financial aid programs. Grants may range from $100-$4,000. Preference is given to full-time students who show exceptional financial need.

College Work-Study Program

The College Work-Study Program provides part-time employment of up to 20 hours per week to students in financial need. Preference is given to full-time students who have no other source of employment, either on or off campus.
**Student Employment**

Part-time, on-campus employment opportunities are provided on a limited basis for students who do not qualify for the work-study program but possess required skills. Interested students will need to complete the Free Application for Federal Student Aid (FAFSA) to determine eligibility. For more information, refer to MCC’s website at: www.muskegoncc.edu

**Direct Loan**

The Direct Loan Program provides long-term, low interest loans to students. Before applying for a loan, the student must first apply for the Federal Pell Grant Program. A student who demonstrates financial need based on federal guidelines may qualify for an interest-subsidized loan (i.e. the Federal Government pays the interest while the borrower is in school). Students who do not show need may qualify for an unsubsidized loan, and pay the in-school interest themselves. Repayment of the principal of subsidized and unsubsidized loans does not begin until six months after the borrower ceases half-time attendance.

**Parent Loan for Undergraduate Students (PLUS)**

Parents of students under the age of 24 may borrow under this program. The PLUS Loan is not based on financial need.

**State Programs**

**Michigan Competitive Scholarship Program**

The Michigan Competitive Scholarship Program provides tuition grants of up to $1,500 per academic year. Eligibility is based on both financial need and academic achievement. Students must achieve a qualifying SAT score of at least 1200 prior to entering college, and complete their Free Application For Federal Student Aid (FAFSA) by the first of May. Students may receive up to ten full semesters of assistance, provided they renew their application each academic year. Further information may be obtained from the high school guidance office or the State of Michigan website (www.Michigan.gov).

**Michigan Tuition Incentive Program (TIP)**

The TIP Program provides grants to cover tuition and some fees for eligible low-income students who graduate from high school or complete a GED before their 20th birthday. The TIP Program may cover up to a maximum of 80 credit hours. TIP students who complete an associate’s degree or at least 56 credits at the community college level may be eligible for additional funding if they transfer to a four-year Michigan college or university. The TIP application must be completed prior to the deadline of August 31 of the academic year in which the student graduates from high school or its recognized equivalent.

**Michigan Reconnect**

Michigan Reconnect (Reconnect) provides last-doller tuition-free access to community college for Michiganders 25 or older without college degrees to pursue Pell-eligible associate degrees and occupational certificates. Reconnect covers resident tuition rate, contact hours, and mandatory fees. Interested Michiganders must complete a one-time Reconnect application at Michigan.gov/Reconnect.
Other Federal and State Programs

**Vocational Rehabilitation Service Program**
This state program provides assistance to students who have physical, mental, or emotional disabilities. Information may be obtained by contacting any Michigan Department of Career Development Rehabilitation Services District Office.

**Native American Tribal Scholarships**
This federal program provides financial assistance for needy Native Americans. Applications may be obtained by contacting your tribal chairman. Students must also apply for financial aid through the College by submitting the FAFSA (Free Application for Federal Student Aid).

**Michigan Indian Tuition Waiver**
Contact your tribe or the Michigan Department of Civil Rights to determine if you qualify for the tuition waiver.

**MCC Adult and Re-entering Scholarship**
Amount: up to $1,000 annually. This scholarship is for non-traditional students. Requirements:
1. Must be in a degree seeking program.
2. Must be enrolled in a minimum of 6 credit hours.
3. If re-entering, there must be a three-year break in your education at Muskegon Community College for you to be considered for this award.
4. Must complete FAFSA to demonstrate financial need.
5. Minimum 2.0 high school or last college attended GPA.
6. General essay required.

**Senior Citizen Tuition Waiver**
Muskegon County Residents who are 60 years of age or older may enroll under the Senior Citizen Tuition Waiver program. This program waives tuition for both credit and audited courses, except for Medical Assistant, Nursing, Respiratory Therapy. Financial need is not a criterion for this program. You must provide proof of eligibility prior to the start of the semester at the Student Welcome Center. You may still be eligible for Financial Aid. For more details about the requirements and procedures for this tuition waiver, visit www.muskegoncc.edu

**Achievement-Based Scholarships In Academic and Performance Areas**
This program provides tuition grants to students who demonstrate a particular creative talent (for example: in art, music, drama, dance, creative writing, etc.) or a high level of achievement in a certain academic area. Students are nominated by the faculty of each academic department and each department sets its own guidelines for selection of students. Recipients are normally expected to participate in the activities of the department and/or maintain a specified level of academic achievement within their program of studies.

This program is not based on financial need. Grants may range up to full tuition, and may be renewed upon the recommendation of the department. Information may be obtained by contacting the Chairperson of the academic department in which the student is interested, or on MCC’s website under scholarships.

**Athletic Grants**
These grants, ranging up to full tuition and books, are available to students who demonstrate collegiate-level athletic ability, carry a minimum of 12 credits per semester, and participate in one of the intercollegiate sports offered at MCC. Students must maintain academic eligibility in order to participate in intercollegiate athletics as well as to receive a grant.
Local Community Programs

Many local clubs, businesses, and agencies sponsor scholarship programs. High school students should contact their guidance counselor for information on these sources of financial aid.

International Study Programs

For information on international, travel and study opportunities at MCC, visit www.muskegoncc.edu/international-studies/. MCC offers ten study abroad programs through partnerships with the Illinois Consortium for International Studies and Programs. Programs vary in length from two weeks to three months and provide students with exceptional choices of programming and experiences.

Honors Program

Muskegon Community College offers Honors credits to eligible students in an attempt to add an extra dimension to the education of academically motivated students.

Honors options will permit you, if eligible, to earn an additional credit in certain MCC courses. To earn this additional credit, you must complete the requirements outlined by the instructor.

The basic purpose of honors options is to enable instructors to make challenging and enriching assignments for students to gain a more sophisticated knowledge of the discipline. The additional work required on the student’s part should typically require an average of two to three hours per week during the semester.

You may register for honors options when you receive instructor permission. Registration for the honors options can take place up to two weeks after the semester begins to allow time for you to meet with your instructor to discuss the requirements of your Honors coursework.

You will receive separate grades on your transcript for the regular course and for the one-credit honors option. Honors options are designated on your transcript as “HON” after the course number.

For additional information about honors options, see MyMCC under the Academics tab.
**Phi Theta Kappa**

*Room 1055*

Phi Theta Kappa is the international honor society for community college students. Eligibility requirements include:

- Earn 12 or more 100-level college credits at Muskegon Community College OR six or more 100-level college credits at MCC if in a certificate program
- Earn and maintain a 3.25 GPA or higher
- Be currently enrolled

Interested students can contact advisors at PTK@muskegoncc.edu.

---

**College Success Center**

*Room 3081*  
[www.muskegoncc.edu/college-success-center](http://www.muskegoncc.edu/college-success-center)

The College Success Center’s goal is to assist students in attaining academic success. We do this by helping them understand how they learn best and how to effectively use resources to maximize their learning. We meet students where they are and support them on their academic journeys.

Courses are offered in traditional classroom settings, asynchronous online, and synchronous online formats and include the following:

- an integrated reading and writing course that is taken as co-requisite support for English 101
- introductory math courses
- a college success strategies course

The College Success Center is open at convenient times to provide students with flexibility in their scheduling. A variety of academic support services are offered both in-person and online.

**Support for Math Courses**

Students in CSC Math courses should expect to receive supplemental instruction outside the classroom to provide constant support of skill development.

**Tutoring Services**

Free tutoring services are available for all MCC students. Tutors can provide individual support to help students better understand assignments and course material.

**The Writing Center**

The MCC Writing Center is designed to develop better writers. Students can get help with any writing assignment at any point in the writing process.

In-person and online Tutoring and Writing Center appointments can be made by navigating to the MyMCC page, selecting the Appointment Scheduling icon, and selecting the desired appointment type.
Tutoring Services

Room 3081 • www.muskegoncc.edu/tutoring
231-777-0393 or email: tutoring@muskegoncc.edu

In addition to utilizing your instructor’s office hours, we strongly encourage you to take advantage of Tutoring Services. If you find yourself struggling in a course, this is an excellent resource for getting extra support.

**Peer Tutoring**

If assistance is needed in a specific course, a student can schedule an appointment through TutorTrac. This is found by navigating to the MyMCC page, selecting the Appointment Scheduling icon, then Tutoring Appointment. Student tutors, recommended by instructors, are available to any current student. The number of hours per week of free tutoring available to students varies with the number of credits being taken. The Tutoring Services website is available to any student who has Internet access.

**Online Tutoring**

Do you need help from home or work? Online Tutoring is available to all students. When scheduling an appointment, please request to meet online in the Notes section, and a tutor will email you a Zoom link.

**Drop-in Tutoring**

Drop-in Tutoring is a set schedule of times when a tutor will be available to assist with problems without an appointment. The schedule is available on TutorTrac.

**Supplemental Instruction (SI)**

Supplemental Instruction is a small group academic assistance program which has shown to help increase student performance. It is offered only in specific introductory classes. Check with your counselor or Tutoring Services and SI Supervisor for more information.

**Becoming a Tutor**

We are always looking to grow our team! If you are interested in becoming a peer tutor, we invite you to visit the College Success Center or email tutoring@muskegoncc.edu to get more information.
Disability Support Services

Room 2046 Phone number: (231) 777-0309
E-mail: mecdss@muskegoncc.edu
Website: www.muskegoncc.edu/dss

Mission
Disability Support Services (DSS) is committed to ensuring that every qualified student with a documented disability has equal access to educational programs, services, and activities at Muskegon Community College. In alignment with the vision of Muskegon Community College for an educated, inclusive community, Disability Support Services recognizes disability as a valued aspect of diversity and continuously strives to create a more universally accessible environment.

Legal Adherence
Muskegon Community College adheres to all legal requirements of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990 as amended (ADAAA) in 2008.

Accommodations
Muskegon Community College strives to reduce the impact of disability on a student’s opportunity to learn by providing accommodations to eligible students. Accommodations must be reasonable and are determined based on the student’s documentation and individual need. Disability Support Services will receive accommodation requests at any point in the semester; however, students should allow a minimum of two weeks processing time for accommodations to be implemented once all required documents have been received. Please note that accommodations cannot be provided retroactively.

Auxiliary Aids
The DSS office makes auxiliary aids, such as assistive technology, available to qualifying students.

DSS Counseling & Advising Services
Disability Support Services provides specialized counseling and advising services for students with disabilities. The DSS counselor is a Limited Licensed Professional Counselor (LLPC) in the State of Michigan and provides students with comprehensive academic advising, career counseling, group counseling, and short-term personal counseling services. Students who register with Disability Support Services should work with the DSS counselor as their assigned academic counselor regardless of degree pathway.

Perkins Occupational Grant
The Perkins Occupational Grant provides financial assistance to eligible students who are enrolled in occupational programs at Muskegon Community College. To view eligibility requirements and to learn more about applying for a Perkins Occupational Grant, please visit www.muskegoncc.edu/dss

Service Animals
While not required, it is highly recommended that a student with a service animal register with the Disability Support Services office prior to bringing the service animal on campus.
Career and Transfer Services

Career Services
Room 1055
The Career Services Office is here to help with your employment needs while you are enrolled and after you graduate. We provide personalized guidance and assistance in the career decision making process by helping you identify your talents, interests and values while setting clear educational goals. For more information and upcoming events visit, www.muskegoncc.edu/career

Assistance is available every step of the way. Students are encouraged to take advantage of the following services:
• Resume and Cover Letters
• Interview Skills
• Workshops
• Recruitment Events
• Job Fairs
• Hire a Jayhawk (Online Job Board)

Want to see current job openings or post a job? Visit: https://www.muskegoncc.edu/career/

Transfer Services
Room 1055
The transfer process can be complex with information coming from all directions: admissions applications, college visits, official transcripts, credit evaluation, essays, references, academic requirements, financial aid, housing arrangements, major choice, etc. We can help with it all. We can provide the following services:
• Schedule an appointment to help you determine which college or university will best meet your needs
• Assist you with creating a plan to ensure you meet the transfer requirements of your chosen institution
• Navigate the application process and offer tips on essays and references
• Provide resources such as transfer guides, course equivalencies, scholarship information, college directories and catalogs to help you make the best choice
• Connect you with representatives on campus from four-year colleges and universities during Transfer Fairs and Information Sessions

For more information and upcoming events, visit www.muskegoncc.edu/transferservices

Internship Program
MCC realizes that there are important elements of business and industry which cannot adequately be taught within the confines of the laboratory or classroom walls of MCC, and therefore, has an active internship program. The goal of the internship program is to provide the student with on-the-job experiences supervised by successful, experienced professionals. This experience shall directly support the development of a student’s technical skills, knowledge, and career path. The employer shall gain a reliable, flexible, and enthusiastic potential employee while assisting in the student’s career preparation goals.

For more information, visit the internship page www.muskegoncc.edu/student-life/internships/ or contact internship coordinators.

For information on Business and Applied Technology internships - Jared Olson, Workforce Training and Internship Coordinator in the Sturrus Technology Center, Room #120, at (231) 777-0300 or jared.olson@muskegoncc.edu.

For information on Education Department internships - Jennifer Jones at (231) 777-0397 or Jennifer.jones@muskegoncc.edu.
**Hendrik Meijer Library**

*Room 1065*

Formerly the Allen G. Umbreit Library, the Hendrik Meijer Library provides instructional materials and information services to support the curricula offered by the College and to meet the informational needs of students, faculty, staff, and administration. The library extends these services to the community and serves as a catalyst in the lifelong learning goals of the citizens of Muskegon County and the greater West Michigan area.

**Public Services Desk**

The MyMCC OneCard is used as a library card. To activate it as a library card, students must bring their MyMCC OneCard to the library along with a valid Michigan driver’s license or identification card. You must present your card to check out materials.

Most materials may be renewed at the public services desk. You may renew these materials over the telephone by calling (231) 777-0270. If a book you want is already checked out, you may place a hold on it. Holds may be placed at the public services desk. Ask at this desk for print periodicals, newspapers, CDs, DVDs and Webcams.

Textbooks and “instructor reserved” items are also at the public services desk. These materials have varying check-out periods or may be limited to library use only. Also, you may reserve a group study room at this desk.

**Reference Area**

The reference librarians will assist you in learning how to locate and use materials in the library. They can help you select materials, evaluate sources, and properly document your sources. This area contains reference material in print form and also on electronic databases. Ask a reference librarian for assistance in using these tools. There is a librarian available all hours the library is open.

**Library Catalog**

All books, instructor reserved materials, print periodical subscriptions, video cassettes, DVDs and CDs are listed in the online catalog. The catalog, which is mobile friendly, provides location information which enables users to quickly determine where the material is located and if it is available. If you need assistance in finding materials, ask at the reference desk or the public services desk.

**Classification System**

A collection of approximately 65,000 volumes is shelved in the library using the Library of Congress classification system. Subject divisions can be used for general browsing. For more specific searching, check the online catalog first or see a reference librarian.
**Research Databases**

Use the research databases to locate articles, reports, and online books. Many articles may be printed directly from the computers. Most of these databases are also available off campus. Access the library databases via the MyMCC library page. The majority of our periodicals are available only in electronic format via our numerous databases.

**Special Facilities**

- Wheelchair accessible stations are available for viewing the online catalog and for computer use.
- Book drops are located in various places throughout the campus:
  - At the public services/circulation desks
  - In the hall outside the front door of the library
  - In a drive-up outside the library in the circle drive
- A copy machine is available on the first floor.
- The Cybercafe with vending machines is on the first floor.
- A microfilm/microfiche reader is located on the first floor near the reference desk.

For more information regarding library services, contact:

- Library Information: (231) 777-0269
- Reference Services: (231) 777-0326
- Circulation/Public Services: (231) 777-0270
- Interlibrary Loan: (231) 777-0205
- Information Commons: (231) 777-0645 or (231) 777-0119

**Interlibrary Loan**

Books and journal articles not available at the MCC library may be requested through Interlibrary Loan.

**Archives**

The Archive is a collection of historical material about Muskegon Community College. For access to this material, ask a reference librarian.

**Group Study Rooms**

These six rooms are reserved for groups of two or more involved in collaborative study or for viewing academic or reserved videocassettes or DVDs. Rooms may be checked out at the Public Services desk.

**Quiet Reading Room**

The quiet reading room is intended for quiet study.

**Computers for Student Use**

For students who desire research assistance, there are computers, including one MAC, near the reference desk on the first floor.

**Office of Information Technology**

Room 1031

MCC students should call the Student Technology Helpdesk at (866) 718-5170 for all technology-related issues. The technicians at the Student Helpdesk are specially trained to work with students’ technology needs and are available 24/7/365.
- Rent your textbooks from us and save 50%
- Buy used and save 25% (when available)
- Your best source for new and used textbooks
- Bring in your course schedule and MCC photo ID and get the books you need
- Pre-order your textbooks online at muskegoncc.bncollege.com
- Course textbooks are available at the beginning of each semester and session
- All students need a MCC ID card to purchase their textbooks on student financial aid
- Student financial aid begins 10 days before first day of class

**Sell Your Used Books for Cash**
- Exam week is the best time to sell back your books
- We cannot guarantee the purchase of all available books
- We reserve the right to refuse purchase of damaged or textbooks not purchased at the MCC Bookstore
- All Students need MCC ID card, and schedule to sell back books

**Check Out the Bookstore for Other Great Items**

**Textbook Return Policy**
- All refunds must be accompanied by the original sales receipt.
- Refunds will be issued in the original form of payment.
- Textbooks may be returned within the first full week of class. (Date provided on sales receipt)
- With proof of a schedule change (cancelled course, drop/add), textbooks may be returned within 14 days of class.
- See receipt for details on our Return Policy.
The MCC Veterans Office is here to serve all military-connected students in our community. Whether a current servicemember, a veteran, a reservist, or a child or spouse of military personnel, the office is here for you. The office provides current benefit information, connections to community and national programs, and assistance in completing VA forms for educational benefits. The MCC Veterans Office also provides support for the Student Veteran Organization. The MCC Veterans Office can be reached at (231) 777-0342 or MCCVeteransOffice@muskegoncc.edu.

**Our mission**
- Help clear up any uncertainties about VA’s current benefit chapters.
- Aid in applying for your educational benefits through VA.
- Help with certification requests to activate your aid for the desired semester attending.
- Aid with the Military Tuition Assistance programs for active duty and reserve personnel.

**Veterans Programs**
U.S. military veterans, veteran dependents/survivors, and Reserve/National Guard personnel may be eligible to receive aid under one or more of the programs listed below. Applications for most federal programs are found at www.va.gov. Applications for the state program may be obtained by contacting the Michigan Veterans Trust Fund, Information and forms are also available from the College’s Veterans Office. The Veterans Office will also assist students in completing forms for other veteran benefits.

**Federal G.I. Bill® Chapters and Eligibility Requirements**

**CHAPTER 30** — This federal program provides educational benefits for veterans who entered military service after July 1, 1985. Veterans who entered military service before January 1, 1977 and served actively for at least two years after July 1, 1985 may also be eligible (Montgomery G.I. Bill).

**CHAPTER 31** — This federal program provides education benefits to eligible disabled veterans (Veterans Readiness and Employment - VR&E) with at least 20% service connected disability to be considered for Veterans Readiness and Employment. To get more information regarding this program please go to www.va.gov/careers-employment/vocational-rehabilitation.

**CHAPTER 33** — The Post-9/11 GI Bill® is for individuals with at least 90 days of aggregate service on or after September 11, 2001, or individuals discharged with a service-connected disability after 30 days. You must have received an honorable discharge to be eligible for the Post-9/11 GI Bill®.

**CHAPTER 35** (DEA) — This federal program provides educational benefits to children (between the ages of 18 and 26), spouses, and widows/widowers of totally disabled or certain deceased veterans.

**CHAPTER 1606** — This federal program provides educational benefits to persons who entered a six year Reserve or National Guard obligation after July 1, 1985 (Selected Reserve/National Guard G.I. Bill®).

For more information visit www.va.gov/education

**GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at www.benefits.va.gov/gibill**

**Michigan Child of Veterans Tuition Grant**
This state program provides benefits for children (between the ages of 16 - 26 years) of certain totally disabled or deceased Michigan veterans. Eligible students must enroll at least half-time, and may receive up to $2,800 per year for tuition and class fees. (Formerly, Children of Veterans Tuition Grant). The grant is administered by the Michigan Department of Treasury. More information available at www.michigan.gov/mistudentaid/programs/children-of-veterans-tuition-grant, or call 888-447-2687. Assistance is also available by making an appointment in the Veterans Office.
MINGSTAP
Public Act 259 of 2014 established the Michigan National Guard State Tuition Assistance Program (MINGSTAP) to provide tuition assistance to members of the Michigan National Guard who are attending any public or private college, university, vocational school, technical school or trade school located in Michigan. Currently, qualified soldiers can apply for up to $6,000 in tuition assistance per year. For more information about the program, please visit www.michigan.gov/dmva/about/ mingstap or call (517) 481-7640.

Responsibilities for Students with VA & Military Education Benefits (GI Bill®)
United States Department of Veterans Affairs (VA), the United States Department of Defense (DoD), the State of Michigan and the Michigan National Guard offer educational benefits to qualified veteran and military students and/or their dependents provided the beneficiary meets guidelines put forth by the program. To use these educational benefits, students must fulfill the responsibilities below.

1. I agree to request official transcripts from all previously attended institutions, including the Joint Services Transcript (JST) or Community College of the Air Force, be sent to the MCC Records Office for evaluation.

2. I agree to choose a valid program at MCC, and understand my benefits will only pay for classes that are within that program. If appropriate, I will officially change my program of study at the Counseling and Advising Center and notify the Veterans Office. I understand that only courses outlined in my program of study will be certified for payment, if the courses are within VA guidelines.

3. I agree to complete a Certification Request for VA Educational Benefits online in MyMCC for every semester I wish to draw VA Educational Benefits. I understand that submitting this request less than eight weeks prior to the term beginning will likely delay my benefit payment.

4. I will meet the MCC Standards of Academic Progress (SAP) and maintain at minimum a cumulative 2.0 GPA (detailed SAP requirements are available on page 319). I understand that if my GPA falls below 2.0 and/or I do not meet SAP, I will be placed on probation and be allowed one semester to get back into good standing. If I fail to do so, the VA will be notified of unsatisfactory progress and I understand that my benefits will be suspended.

5. I will complete the classes I start. I understand that if I stop attending class, withdraw, or drop classes, a debt will be established in my name.

6. I understand that the VA does not permit a course to be repeated in which I have earned a grade of D or better except in special circumstances where a higher grade is specifically required for me to graduate with my degree.

7. I understand that taking courses that start late or end early in the standard semester will impact my pay.

8. It is my responsibility to self-verify attendance monthly through www.gibill.va.gov/wave/ (Ch 33, Ch 35, MINGSTAP & CVTG excluded).

9. I will maintain responsible communication to inform the Veterans Office of any updates or correspondence pertaining to my VA educational benefits to ensure accuracy and efficiency, and I will stay up to date with information posted on the MyMCC Veterans Portal page.

For additional information regarding VA, certification, paperwork, or general information please visit the MCC Veterans website at www.muskegoncc.edu/veterans and in MyMCC.

Veteran Residence
See Residency Policy on page 12.

VA Student Payment Dates
Students who are receiving VA Education Benefits are expected to pay tuition and fees by the payment deadline date established by the College each semester, with exception to the following:

- Students receiving Post 9/11 Benefits and have a Certificate of Eligibility (COE) or Statement of Benefits on file in the MCC Veterans Office will receive a deferment on tuition and fee payment until payment arrives from the VA. Students shall complete a Certification Request in their MyMCC account each semester to indicate plans to use Post 9/11 Benefits.
RESOURCES AT MCC

Registered Student Organizations and Clubs

Student Life
Room 1055

The Muskegon Community College Office of Student Life, as a division of the Student Success Department, seeks to engage students through

- celebrating Jayhawk pride,
- out-of-classroom programming,
- leadership development, and
- community connections

Students are encouraged to enrich their college experience by participating in college-sponsored events and activities. These activities help students meet peers, learn new skills, connect with resources, mentor others, and ultimately persevere through the challenges of college life. The Office of Student Life oversees the planning of the annual Jayhawk Frenzy welcome events at the beginning of each Fall Semester, in addition to monthly events and programs throughout the academic year. Staff from Student Life are housed on campus in the Student Success Department, Room 1055 where students can study on campus computers, and find campus and community resource literature. Student Life is also where students can start or join a student organization, and build leadership through this involvement. The Office also facilitates wider strategic partnerships by inviting community organizations which may benefit diverse student needs and interests onto our campus.

Students participating in the Vocational Rehabilitation Program, Chapter 31, and have a current VAF 28-1905 form on file from their Voc Rehab Counselor will receive a deferment on tuition and fee payment until payment arrives. Student shall complete a Certification Request in their MyMCC account each semester to indicate plans to use funding from Vocational Rehabilitation to cover tuition and fees payments.

Students using Post 9/11 (Chapter 33) or Vocational Rehabilitation & Employment (Chapter 31) shall be entitled to all privileges as a Muskegon Community College student, and shall not be penalized for payments arriving after payment due date so long as Certification Request is submitted by payment due date each semester.

Student Life adds to the college experience by offering the opportunity to join many diverse clubs and organizations on campus. Our goal is to empower students by providing social and leadership roles with the purpose of creating tomorrow’s leaders.

Student organizations encourage intellectual, social, cultural and leadership development. In many cases these organizations enable students to work on projects related to the classroom experience. Current information on such activities is publicized on campus each semester.

If you have a common interest with other students and would like to form a student organization, stop by the Student Success Department. Full-time faculty advisors oversee each club. Members must be enrolled as students at MCC.

Lists and contact information for currently recognized student groups are available online at www.muskegoncc.edu/student-life
Student Government Association (SGA)
*Housed in the Student Success Department, Room 1055*

SGA serves as the official representative body for MCC students. It provides a forum for expression on matters of concern to the student body, and presents opportunities for the development of student leadership.

*The Goals of SGA:*
- To convey the student voice to the administration and Board of Trustees.
- To provide for discussion, investigation and resolution of student problems, concerns and ideas.
- To retain authority to appoint and remove student representatives to the College’s Council System and designated committees.
- To promote the interests of the College’s student community.
- To protect and uphold student’s rights.
- To plan, encourage and promote participation in College events and community service activities.
MCC Jayhawk Athletics

Bartels-Rode Gymnasium

MCC has maintained a program of intercollegiate athletics for both men and women for many years, while attempting to maintain teams in a wide variety of competitive fields. MCC is a member of the Michigan Community College Athletic Association, Region 12, and the National Junior College Athletic Association. Men’s sports include baseball, basketball, bowling, cross country, golf, soccer, track & field, and wrestling. Women’s sports include basketball, bowling, cross country, soccer, softball, track & field, and volleyball. In 2022-2023, co-ed Esports was added. Call (231) 777-0381 or (231) 777-0462 for information.

Questions about eligibility should be directed to the Athletic Director. Transfer students should secure a transcript from any college previously attended and have it placed on file in the Office of the Registrar to aid in the determination of eligibility. Athletic scholarships are available in all sports sponsored by the College.

All regular season home contests and games are currently free to the public. Home contests and games that are indoors are held in the MCC Bartels-Rode Gymnasium. Home baseball and softball games are played on the baseball/softball fields which are south of the gymnasium. Men’s and women’s soccer and track & field contests are held off-campus at local high schools.

Please check www.muskegoncc.edu and click on “Athletics” for up-to-date schedules and other information.

MCC Recreation

The Health and Wellness Center is home to the HPER and Athletic Department offices as well as a state of the art fitness center, weight room, walking/jogging indoor track, gymnasium, fitness lab, and men’s and women’s locker rooms. The facility is free to use for current MCC students, staff, and faculty members.

MCC is committed to providing activities that match the interests and desires of its students. The MCC Intramural Sports program shares in those efforts by providing multiple free co-ed sports leagues that include basketball, golf, volleyball, tennis, and bowling.

Athletic Director
Marty McDermott
(231) 777-0462

Head Coaches

Nate Glant  
*Men’s Baseball*  
Gene Gifford  
*Men’s Basketball*  
Jason Cooper  
*Women’s Basketball*  
Bill Bowen  
*Men & Women’s Bowling*  
Nick Marcinkowski  
*Men & Women’s Cross Country*  
Marty McDermott  
*Men’s Golf*  
Sam Felicioni  
*Men’s Soccer*  
Amy Lassanske  
*Women’s Soccer*  
Dave Veihl  
*Women’s Softball*  
Rick Rykse  
*Women’s Volleyball*  
Mark Brunger  
*Men’s Wrestling*  
Nick Marcinkowski  
*Men & Women’s Track & Field*

David Klinger  
Co-ed Esports
Campus Facilities

Art and Music Building
The state-of-the-art, Art & Music Building is home to MCC’s Music and Visual Arts. The art wing has studios for painting, drawing, ceramics as well as lecture presentation rooms. The music wing houses a computer music and piano lab, soundproof recordable practice rooms, music teaching suites, music library, recording studio and rehearsal halls.

Observatory
Located at the property of the Muskegon County Wastewater System, 8301 White Road, Muskegon, the observatory is used for MCC’s Astronomy and Cosmology students doing project work and by the Muskegon Astronomical Society.

Distribution and Display of Materials
Advance approval must be obtained from the Director of Student Success (or designee) for the distribution or display of posters, signs, pamphlets and handbills, newspapers or other form of printed material or visual aids originating from sources not connected with the college. Material should be brought to room 1055 for approval in distribution.

Elevators
Elevators are located in the lobby of the Hendrik Meijer Library and Information Technology Center, by the Welcome Center, at the Stevenson Center for Higher Education on the first floor near the main entrance, at the northwest corner of the main building near the English department, and in the Overbrook Theater lobby.

Frauenthal Foundation Fine Arts Center
At the heart of the Fine Arts Center is the 300-seat Overbrook Theater and adjacent Art Gallery, where works by students, faculty, and guest artists are exhibited. The Center also includes two large rehearsal rooms for theater and a studio equipped with a Marley floor and mirrors for dance.

Classrooms
More than 100 classrooms, laboratories and conference facilities are available on campus, completely furnished to meet the needs of their particular disciplines.

Collegiate Hall
Collegiate Hall is located on the second floor. It offers students a quiet place to study where they may also eat. On occasion, this space may be utilized for conferences and workshops. When this occurs, students should use the first-floor hallway as an alternate route to classrooms.
**Gerber Lounge**
Gerber Lounge is located on the first floor directly across from the main entrance of MCC. It serves as a meeting place, study area, and rest stop for students and visitors. As a courtesy to all, there are some restrictions on the use of the lounge. No card playing, no food or beverages, and no loud or boisterous behavior are allowed in the Gerber Lounge.

**Golf Course**
University Park Golf Course is a public golf course owned and operated by Muskegon Community College. Established in 1968 and located across the street from the main campus, the nine-hole course was designed by Bruce Matthews. The course features two different tee-off areas to make for an interesting and challenging 9-holes of golf. Open seven days a week from April until October, the course has a driving range and putting green. University Park Golf Course is home to numerous leagues, catering to every caliber of player.

**Health and Wellness Center**
The 52,400 square foot Health and Wellness Center is next to the gymnasium. It includes classroom and learning space for Physical Education, Recreation, Nursing, and Respiratory Therapy. Trinity Health also has a patient care facility in the building.

**John Bartley Science Museum**
The John Bartley Science Museum opened in 2017 as part of MCC’s promotion of STEM education and awareness. Free and open to the public, the museum honors the legacy of Dr. John Bartley, who taught geology and math at MCC for many years, and his strong commitment to scientific outreach. Located near our popular planetarium, the museum offers interactive, “hands-on” exhibits that engage children and adults alike. For more information, please email tamera.owens@muskegoncc.edu or call (231) 777-0289.

**Kasey Hartz Natural Area**
The diversity of the wooded forest immediately north of the Muskegon Community College campus provides an ideal setting for our educational Natural Area. The Natural Area and associated nature trail are suitable for all ages. Reservations for group tours with guides need to be at least two weeks in advance, and can be made by calling the Life Science Department at (231) 777-0273. Spring tours are available starting mid-April through June, and Fall tours are September through October, depending on weather. Individuals are free to explore on their own.

**Lockers**
Lockers for students’ use are available in the Student Union. Lockers are free. Students may purchase locks in the Bookstore. Please place valuables in the lockers. At the conclusion of each semester all items and locks must be removed.

**Lost and Found**
Found items can be turned in at the Security Desks, located in the Main Lobby or the Stevenson Center. Lost items can be reported at either location or you can call (231) 777-0545.

**Overbrook Gallery**
Overbrook Gallery, located in the Frauenthal Fine Arts Center on the campus of Muskegon Community College, exhibits work by local, Michigan, and out-of-state artists and MCC art students in a variety of solo, group, and thematic shows throughout the year. Exhibits are always free and open to the public. Visiting artist presentations are scheduled in connection with shows. Gallery hours are 9:00-4:00 weekdays with special weekend and evening hours during theater performances, receptions, and gallery talks. Call (231) 777-0324 for details.

**Parking**
Two large parking lots serve the campus. The main lot is located south of the Main Building, and may be entered from Marquette Avenue or from Quarterline Road. The east entrance is located north of the James L. Stevenson Center for Higher Education, and may be entered from Quarterline Road.

**Parking - Handicapped**
Handicapped parking spaces are available near all main entrances. Students needing special parking are urged to apply for a reserved space in this area through the Physical Plant Office, Room 1356.

**Parking Permits**
Register your vehicle at the Student Welcome Center. Parking permit decals are required on all vehicles. Protect your vehicle. You may get a parking sticker at the Student Welcome Center or in Room 1356.
Restricted parking areas are few, but they are well marked. Roadways are considered emergency vehicle areas and should never be blocked. Citations are written, ranging from $3.00 to $25.00 for violations. Excessive violations will result in loss of parking privileges or cars being towed at the owner’s expense.

All applicable City of Muskegon ordinances are enforced in MCC parking areas. Report any accidents or incidents to the Physical Plant (Room 1356) immediately or call Security at either (231) 777-0545 or their cell phone at (231) 557-5648. Prevent problems by keeping your vehicle locked and taking valuables with you.

Printing Services
A coin-operated copy machine is located in the library. Students can also send a Printing Request through MyMCC and pick it up the next day in the Quick Copy Center.

Room Numbers
The 1000’s will run sequentially across the main floor of the main campus, with the 2000’s in the same sequence below on the second floor and the 3000’s in the same order beneath on the third floor. The 1200’s will be located in the Art and Music Building. The 1300’s, 2300’s and the 3300’s are on the Stevenson Center first, second and third floors, respectively. The 1400’s are in the Science Center. The 1500’s are located in the Automotive Building. The stairwells are denoted with capital letters, from A-L. The main entrance to the Stevenson Center for Higher Education can best be accessed by utilizing the east parking lots (second entrance off of Quarterline Road).

Stevenson Center for Higher Education
Named for MCC’s 8th president James L. Stevenson this 93,500 square foot building is contiguous to the main academic facility on campus. The Center contains 40 classrooms/conference rooms including computer classrooms, a large conference room, a large lecture hall, and a science room. The Stevenson Center is also the home of MCC TV and the Quick Copy Center. Technology advancements allow for a variety of instructional delivery system.

Sturrus Technology Center
The Sturrus Technology Center (STC) is an extension site of MCC located in downtown Muskegon at 388 W. Clay Ave. STC houses Applied Technology, Entrepreneur (Lakeshore Fab Lab), and Experiential learning programs. Over 75,000 square feet of finished space include machining, welding, materials testing, computer aided design, foundry and numerous other classrooms.

Vending Services
Vending machines are located throughout all MCC buildings and campuses. Vending offers hot and cold beverages and snacks. Vending machines accept cash, credit cards.

In addition to the vending machines, Muskegon Community College offers a PICO Market, located in the Student Union on the Main Campus to provide food options for faculty, staff and students. The PICO Market offers take and heat meals, sandwiches, salads, snacks, and cold beverages.

The PICO Market is a cashless venue and accepts all cards. If someone does not have a debit/credit card, a PICO Market card can be provided upon request.

The College Bookstore also offers convenient options, such as, cold beverages and snacks.
Services for the Community

The College offers courses, workshops, seminars, and special events to meet the lifelong learning needs of the community. These non-credit educational offerings emphasize career development, personal growth, cultural enrichment, and the solution of community problems.

Alumni Relations
MCC is very interested in maintaining life-long relationships with alumni. Former students are encouraged to keep Alumni Relations informed as they earn additional degrees, move, accept new jobs, get married, or reach other milestones. Updates can be sent to Alumni Relations at (231) 777-0461 or alumnirelations@muskegoncc.edu. Alumni and other community members are invited to receive a free subscription to Reflect magazine; simply contact the Alumni Relations office to be included in the mailing list.

The MCC Alumni Relations Committee holds an Alumni Awards Dinner annually before Commencement and celebrates two awards given to select alumni. The Distinguished Alumni Award is the highest honor that Muskegon Community College bestows upon an alum. The award salutes the achievements of outstanding alumni whose personal lives, professional achievements, and community service exemplify the objectives of their alma mater. The Alumni Achievement Award honors those alumni within 15 years of graduation who have made their mark in the world with professional achievement.

Award recipients are selected based on the following criteria:

- **MCC College Career** - The nominee must have earned an associate’s degree, certificate, or completed a minimum of 50 credit hours at Muskegon Community College and have demonstrated a record of excellence in academics and extracurricular participation.

- **Professional Achievement** - The nominee must have distinguished himself or herself through achievement or advancement in his or her career, earned degrees, professional training, professional recognition and/or outstanding contributions to his or her field.

- **Service to the Community** - The nominee shall have demonstrated a record of community participation and involvement.

- **Advocacy of Higher Education and/or support of MCC** - The nominee shall have a successful record in one or both of these areas.

- **Availability** - In addition to the above criteria, the nominee must be available to attend the Alumni Awards dinner and participate in the commencement ceremony.

For more information about these alumni awards, Reflect magazine, or other ways to engage with the MCC alumni community, please contact us at alumnirelations@muskegoncc.edu or visit www.muskegoncc.edu/alumni.

Center for Theater
The Center for Theater operates with the Arts and Humanities Department. It provides theater classes for MCC students as well as a diversified schedule of performances. Performances are presented on the Overbrook Theater stage and include a season of plays produced by the Overbrook Players, music and dance concerts by the MCC Music and Dance Departments, and various lectures, speakers, and performers. The Center for Theater offers something for every MCC student, whether it be the development of artistic talents, investigation of a career in professional theater, or simply the enjoyment and excitement of a live performance. All MCC students are encouraged to participate in the activities of the Center.

Continuing Education
The Continuing Education Office provides lifelong learning opportunities to meet the needs of the community. These non-credit classes emphasize professional development, personal enrichment and community outreach. These courses are offered on campus, as well as online.

- **Continuing Education Courses**: Selected courses developed, offered on campus, as well as online to enrich your life, learn new information, or earn a certificate of completion.

- **State Continuing Education Clock Hours (SCECHs)** may be earned by professionals
who require regular certification upgrading. Trainings or professional development workshops, approved by the State of Michigan Department of Education, may be arranged by calling 231-777-0456. Your program must be approved by the State of Michigan and MCC before you begin your training.

- **Continuing Education Unit credits (CEUs)** may be offered for professions that require regular upgrading for certification. Special seminars to meet the training needs of specific organizations can be arranged by calling at (231) 777-0456.

Information about courses, workshops, seminars, and special events can be viewed online at www.muskegoncc.edu/ce.

**Marketing and Communications**
The Office of Marketing and Communications offers marketing and communications planning, advertising, branding, video production, graphic design, writing, photography, social media, media relations, crisis communications, print services, and website management. We serve the staff and faculty of MCC to benefit our students and community.

**The Foundation for Muskegon Community College**
The Foundation for Muskegon Community College helps Muskegon Community College (MCC) achieve its mission by devoting financial resources to strengthen the high quality education that benefits every MCC student. Contributions allow us to build and renovate facilities, expand academic programs, purchase instructional equipment, provide scholarships, and overall advance the mission of Muskegon Community College. For more information about the Foundation, joining the Foundation Board, or supporting our fundraising efforts, please contact us at foundation@muskegoncc.edu or visit www.muskegoncc.edu/foundation.

**Workforce Development**
The Muskegon Lakeshore area has a long history of creating prosperity for residents through meaningful employment. MCC’s Workforce Development continues this proud tradition. Workforce Development offers businesses connections to many services including custom training, internships and technical related apprenticeships. For information as to the various services available, visit the Workforce Development website as www.muskegoncc.edu/workforce-training/ or contact Stephanie Briggs, Associate Dean of Workforce and Talent Development in the Sturrus Technology Center, at (231) 777-0456 or stephanie.briggs@muskegoncc.edu.
Faculty

Allen, Stephanie  
Surgical Technology  
AAS Delta College  
BA Saginaw Valley State University  
MBA Herzing University

Ammond, Charles  
Electronics  
BSEE University of Michigan  
MBA Grand Valley State University

Anderson, Lisa  
Library  
BA Lake Superior State University  
MLIS Wayne State University  
MA Western Michigan University

Bates, Kathleen  
Nursing, RN, CNE  
BSN Grand Valley State University  
MSN Michigan State University  
DNP Indiana Wesleyan University

Beals, Gayl  
Automotive  
DNP Indiana Wesleyan  
BS, MA Ferris State University

Bender, Nathan  
Machine Technology  
BS Ferris State University  
MA Western Michigan University

Benson, Hollie  
College Success Center - Reading  
BA University of Michigan  
MEd Grand Valley State University  
ACUE Certified in Effective Online College Instruction

Budimir, Nicholas  
Sociology  
BA University of Michigan  
MA Wayne State University

Burrell, Karin  
Mathematics  
BS, MA Western Michigan University  
ACUE Certified in Effective College Instruction

Burris, Yolanda  
Nursing  
ADN West Shore Community College  
BSN University of Phoenix  
MSN University of Phoenix  
DNP Chamberlain University

Casey, Diana L  
Geography  
BA Western Michigan University  
MS Eastern Michigan University  
ACUE Certified in Effective Online College Instruction

Chelesvig, Trefny  
Counseling  
BA University of Northern Iowa  
MA Western Michigan University

Church, Irene  
Business Communication  
BS, MA Central Michigan University  
ACUE Certified in Effective College Instruction

Colcleasure, Sean  
English  
BA California State University  
MA California State University

Collins, Shae  
Nursing, RN  
ADN Muskegon Community College  
BSN Ferris State University  
MSN Ferris State University

Cooper, Matthew  
Life Sciences  
BS Grand Valley State University  
MS Grand Valley State University  
PhD University of Notre Dame  
ACUE Certified in Effective College Instruction

Datta, Arun K  
Chemistry  
BS University of Utah  
MS Auburn University  
PhD University of Utah

Dilley, Alyssa  
Nursing  
BA Ferris State University  
MA Walden University

Do, Hieu  
Mathematics  
BS Eastern Oregon University  
MS, PhD Oregon State University

Enriquez, Ismael  
Spanish  
BA Grand Valley State University  
MA University of Toledo

Evans, Rebecca L  
English  
BA, MA Western Michigan University

Greene, Darryl  
Business  
BA Dakota Wesleyan University  
MBA Heidelberg University

Grube, Debra  
Respiratory Therapy  
BSRT University of South Alabama  
MSM Cornerstone University  
ACUE Certified in Effective College Instruction
HAYES, SHAUNA  
English  
BA Grand Valley State University  
MA College of Charleston

HAYES, SYLVIA M  
Counseling, LPC, NCC  
BA Western Michigan University  
MA Michigan State University

HERRINGTON, AMY  
Nursing  
ADN, BSN, MSN Ferris State University  
ACUE Certified in Effective Online College Instruction

Hoffman, Erin E  
Art  
BFA University of Northern Iowa  
MFA University of Georgia

Houser, Jessica  
Psychology  
BA Franciscan University of Steubenville  
MA University of West Georgia

Jewell, Ronnie D Jr  
English  
BA High Point University  
MA Western Michigan University

Johnson, John J  
Computer Information Systems  
BS Ferris State College  
MEd Ferris State University

Johnson, Michael C  
English  
BA Michigan State University  
MA Western Michigan University  
ACUE Certified in Effective College Instruction

Johnson, Heather  
Medical Assistant  
BS Ferris State University  
MSN Capella University  
ACUE Certified in Effective Online College Instruction

Johnston, Jeffrey  
Computer Aided Design  
BS, MS Michigan State University

Jones, Jennifer  
Education  
BBL Baker College  
MEd Grand Valley State University  
ACUE Certified in Effective College Instruction

Kanoza, Theresa M.  
English  
BA Grand Valley State University  
MA Michigan State University  
PhD Michigan State University

Kendall, Scott  
Biology  
BS Central Michigan University  
MS University of Georgia

Kilburn, Michael  
Math and Science  
BS Northern Michigan University  
PhD Michigan State University  
ACUE Certified in Effective College Instruction

Klingenberg, Jennifer L  
English  
BA Lake Superior State University  
MA Northern Michigan University  
ACUE Certified in Effective College Instruction

Koratich, Joanne  
Mathematics  
BS Kettering University  
MA, MS Georgia Institute of Technology

Knue, Keeghan  
Respiratory Therapy  
BA Grand Valley State University  
MBA Southern New Hampshire University

Kroll, Elizabeth  
Nursing, CMSRN  
BS Wayne State University  
MSN Michigan State University

Kumpf, Amber  
Geology  
BS Michigan Technological University  
MS University of Rhode Island

Kyser, Kevin  
Graphic Design  
BFA Grand Valley State University

Landes, James C  
Computer Information Systems (Game Design)  
BS Southern Oregon University

Larson, Jonathan  
Electronics  
BS Electrical Engineering Kettering University  
BS Mechanical Engineering Kettering University  
MS Engineering Kettering University

Liefer, Kathleen  
Advanced Technology  
BS Michigan State University  
MS Western Michigan University

Macauley, Shawn P  
Biology  
BS, MS, PhD University of Florida  
College of Medicine  
ACUE Certified in Effective College Instruction

Maniates, George  
History  
BA University of Wisconsin - Madison  
MA DePaul University
MARczAK, Gregory
Chemistry
BA University of Michigan
MA Western Michigan University

MAson, Kim
Nursing
BS University of Phoenix
MS Michigan State University

MAttone, Darren C
Biology
BS, MEd Aquinas College
MS Columbia University

MeeuwenBerG, Jon B
College Success Center Math
AS Muskegon Community College
BS, MEd Grand Valley State University

MeYers, Daniel M
Music/Humanities
BA University of Michigan
MA Central Michigan University

MoLe斯基, Tobias B
Physics
BS Grand Valley State University
MS Oregon State University

NoNnemAcher, Gary S
Mathematics
BA Cedarville University
MS Miami University
MEd Ohio State University

NoRdstrom, Brenda
Nursing
BSN, MSN Western Governors University
DNP Indiana Wesleyan University

PaLmer, Nicholas
Arts & Humanities
BA University of Chicago
MA University of Chicago
ACUE Certified in Effective College Instruction

PaRker, Charlyne
Computer Information Systems
BS Aquinas College
MA Western Michigan University

Platt, Dawn
Medical Assistant
ADN Baker College
BSN Ferris State University

PoLlock, Kathy R
Biology
BS Oakland University
MS, MA Michigan State University
ACUE Certified in Effective Online College Instruction

Ribble, Lisa
Counselor, LPC
BS Grand Valley State University
MA Western Michigan University

Riggs, Jennifer
Respiratory Therapy
BA Ferris State University
MEd Ferris State University
ACUE Certified in Effective College Instruction

Roddy, Conor
Philosophy
BA Trinity College
MA University of Hawaii at Manoa
PhD University of Texas at Austin

RoDkey, Evin
Social Sciences
BA Indiana University
PhD University of Illinois at Chicago
ACUE Certified in Effective College Instruction

RoRick, Les (James)
Theater
BA Biola University
MFA University of Virginia
ACUE Certified in Effective College Instruction

Rypma, Dan E
Physical Education/Recreation
BS, MS Grand Valley State University

Shahrp, George
Counseling, LLC
BA Northern Arizona University
MEd Grand Valley State University

ShauGhnessy, Jason
HPER
BA Western Michigan University
MA Azusa Pacific University
ACUE Certified in Effective Online College Instruction

SoMerville, Joshua
Nursing, RN
BSN, Lake Superior State University
MSN Grand Canyon University

SpAniolo-dePouw, Angela
Psychology
BS, MA Central Michigan University
EdD Eastern Michigan University

SuMeRix, Thomas
Welding
AAS Muskegon Community College
BS Western Michigan University
M.Ed. Concordia University

Sy terseMa, Rebecca
Nursing
BSN Calvin College
MSN Grand Valley State University
## Administration - President's Cabinet

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Selmon, John</td>
<td>BS University of Nebraska at Lincoln, MA, EdD Eastern Michigan University</td>
</tr>
<tr>
<td>Provost &amp; Chief Student Services Officer</td>
<td>Conrad, Kelley</td>
<td>BA Alma College, MA, PhD Western Michigan University</td>
</tr>
<tr>
<td>Chief Financial Officer</td>
<td>Dick, Beth, CPA</td>
<td>BA Western Michigan University</td>
</tr>
<tr>
<td>Chief Human Resources Officer</td>
<td>Anderson, Kristine</td>
<td>BS Western Michigan University</td>
</tr>
<tr>
<td>Chief Marketing and Communications Officer</td>
<td>Tank, Kristin</td>
<td>BA Michigan State University, MA Western Michigan University</td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td>Wilson, Steve</td>
<td>BS, MS Ferris State University, PhD Capella University</td>
</tr>
<tr>
<td>Chief Diversity Officer</td>
<td>James, Kenneth</td>
<td>BA Kentucky State University, MA Grand Valley State University</td>
</tr>
<tr>
<td>Chief Advancement Officer</td>
<td>Samaniego, Sue</td>
<td>BS, MA Eastern Michigan University</td>
</tr>
</tbody>
</table>

## Administration - Extended Leadership

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean of Academic Affairs</td>
<td>Rinsema-Sybenga, Dan</td>
<td>BA Calvin College, MEd Grand Valley State University</td>
</tr>
<tr>
<td>Dean of College Services and Athletics Director</td>
<td>McDermott, Marty</td>
<td>BBA University of North Dakota, MS Wayne State College</td>
</tr>
<tr>
<td>Dean of Instruction and Assessment</td>
<td>Breitenbach, Edward</td>
<td>BA Cornerstone University, MEd Grand Valley State University, PhD Western Michigan University</td>
</tr>
<tr>
<td>Dean of Student Services</td>
<td>D’Avignon, Patti</td>
<td>BA Northwood University, MS, EdD Ferris State University</td>
</tr>
</tbody>
</table>
RESOURCES AT MCC

MCC is governed by a seven-member Board of Trustees who are elected for six-year terms on an “at large” basis from throughout the district (Muskegon County). The College’s chief executive is the President, appointed by the Board of Trustees. Serving the institution at the 2023 printing of this catalog are the following persons:

**Governance**

Diana Osborn  
Chair  
Sean Mullally  
Vice Chair  
Donald Crandall, M.D.  
Trustee  
Shon Cook  
Trustee  
Kathy Moore  
Treasurer  
Ann D. Oakes  
Trustee  
John Selmon, EdD  
President  
Roy J. Portenga  
Trustee  
Nancy Frye  
Secretary
PROGRAMS
### Associate in Science and Arts

<table>
<thead>
<tr>
<th>Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate in Science and Arts</td>
<td>52</td>
</tr>
<tr>
<td>Broadcasting and Multimedia/Performance</td>
<td>54</td>
</tr>
<tr>
<td>Criminal Justice/Corrections</td>
<td>56</td>
</tr>
<tr>
<td>Criminal Justice/Law Enforcement</td>
<td>58</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>60</td>
</tr>
<tr>
<td>Health Science</td>
<td>62</td>
</tr>
<tr>
<td>Michigan Transfer Agreement</td>
<td>53</td>
</tr>
</tbody>
</table>

### Transfer Pathways

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Pathway</td>
<td>64</td>
</tr>
<tr>
<td>Biology Pathway</td>
<td>66</td>
</tr>
<tr>
<td>Business Pathway</td>
<td>68</td>
</tr>
<tr>
<td>Communications Pathway</td>
<td>70</td>
</tr>
<tr>
<td>Criminal Justice Pathway</td>
<td>72</td>
</tr>
<tr>
<td>Exercise Science Pathway</td>
<td>74</td>
</tr>
<tr>
<td>Mechanical Engineering Pathway</td>
<td>82</td>
</tr>
<tr>
<td>Psychology Pathway</td>
<td>76</td>
</tr>
<tr>
<td>Public Health Pathway</td>
<td>78</td>
</tr>
<tr>
<td>Social Work Pathway</td>
<td>80</td>
</tr>
</tbody>
</table>

### Associate in Science

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Engineering</td>
<td>83</td>
</tr>
</tbody>
</table>

### Associate in Applied Science

#### ALLIED HEALTH PROGRAMS

<table>
<thead>
<tr>
<th>Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>89</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>98</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>104</td>
</tr>
</tbody>
</table>

#### ARTS/BUSINESS/INFORMATION TECHNOLOGY PROGRAMS

<table>
<thead>
<tr>
<th>Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting and Bookkeeping Services</td>
<td>106</td>
</tr>
<tr>
<td>Broadcasting and Multimedia/Technical</td>
<td>84</td>
</tr>
<tr>
<td>Criminal Justice/Corrections</td>
<td>129</td>
</tr>
<tr>
<td>Criminal Justice/Law Enforcement</td>
<td>130</td>
</tr>
<tr>
<td>Digital Game Development</td>
<td>109</td>
</tr>
<tr>
<td>Graphic Design</td>
<td>122</td>
</tr>
<tr>
<td>Graphic Design Entrepreneur</td>
<td>123</td>
</tr>
<tr>
<td>Information Technology Support</td>
<td>114</td>
</tr>
<tr>
<td>Management</td>
<td>107</td>
</tr>
<tr>
<td>Marketing</td>
<td>108</td>
</tr>
<tr>
<td>Music Performance Entrepreneur</td>
<td>126</td>
</tr>
<tr>
<td>Networking and IT Security</td>
<td>113</td>
</tr>
<tr>
<td>Software Development</td>
<td>115</td>
</tr>
<tr>
<td>Visual Art Entrepreneur</td>
<td>127</td>
</tr>
<tr>
<td>Web Design</td>
<td>118</td>
</tr>
<tr>
<td>Web Game Development Entrepreneur</td>
<td>120</td>
</tr>
<tr>
<td>Website Development Entrepreneur</td>
<td>121</td>
</tr>
</tbody>
</table>
BUSINESS TECHNOLOGY PROGRAMS
Administrative/Office Management ................................................................. 132
Administrative/Office Management - Medical .............................................. 133

EDUCATION PROGRAMS
Child Development Associate ........................................................................ 137
Instructional Assistant, Special Education .................................................... 140
Teacher Aide .................................................................................................. 141

APPLIED TECHNOLOGY PROGRAMS
Agriculture ...................................................................................................... 143
Automotive Technology ................................................................................ 148
Biomedical Engineering Technology ............................................................ 150
CAD/CNC ..................................................................................................... 151
Computer-Aided Drafting and Design .......................................................... 154
Electronics Engineering Technology .............................................................. 158
Engineering Technology ............................................................................... 175
Food Processing Technology ........................................................................ 161
Manufacturing Technology ......................................................................... 166
Machining Technology ................................................................................ 168
Urban Forest Management .......................................................................... 178
Welding Technology .................................................................................... 179

Certificates
Administrative Medical Assistant Certificate ............................................... 134
Apprenticeship Certificate .......................................................................... 146
Automotive Technician Certificate ............................................................... 149
C/Java Programming Certificate ................................................................ 116
CAD/CNC Certificate .................................................................................. 153
Child Development Associate Certificate .................................................. 138
Computer-Aided Drafting and Design Certificate ....................................... 157
Computer Networking CISCO Certificate ................................................... 112
Corrections Certificate ................................................................................ 128
Customer Service Specialist Certificate ..................................................... 111
Electronics Technology Certificate .............................................................. 160
Entrepreneurship Certificate ........................................................................ 110
Food Science Certificate ............................................................................. 163
Graphic Design Video/Audio Certificate ....................................................... 124
Industrial Electricity Certificate ................................................................... 164
Infant-Toddler Development Associate Certificate ................................... 139
Machining Technology Certificate ............................................................... 170
Manufacturing Technology Certificate ......................................................... 165
Manufacturing Machine Repair Certificate ................................................. 171
Manufacturing Automation Certificate ......................................................... 172
Mechatronics Certificate ............................................................................ 173
Medical Assistant Certificate ....................................................................... 86
Midrange Programming Certificate ............................................................. 117
Office Assistant Certificate .......................................................................... 135
Patternmakers Certificate ........................................................................... 174
Quality Assurance Certificate ...................................................................... 177
Web Design Certificate .............................................................................. 119
Welding Technology Certificate .................................................................. 181

Continued on Next Page

2023 - 2024 Muskegon Community College Catalog - 47
Associate in General Studies

General Studies (AGS) Degree ........................................................................................................ 183

Higher Education Partnership Programs

Ferris State University ....................................................................................................................... 184
Grand Valley State University ........................................................................................................... 185
Michigan State University .................................................................................................................. 185

Professional Truck Driver Training

CDL Training Services & Consulting .................................................................................................. 186
The Purposes of General Education

Introduction
The College shares the view held by many that an education should prepare you not only for a career, but also for life. General education encourages the community by providing access to the knowledge common to all educated men and women, regardless of their vocation. General education is designed to cultivate in each student four general abilities of an educated person:

- **Communication:** Knowledge and application of written and verbal communication competencies using college level information literacy skills
- **Problem Solving and Technology:** Knowledge and problem solving skills using logical, mathematical, and scientific reasoning as well as technological resources
- **Ethical Reasoning and Creativity:** Knowledge and application of creativity in the arts as well as knowledge of, and the ability to critically examine ethical values, principles, and issues
- **Personal, Social, and Cultural Awareness:** Knowledge and life skills required of an effective member of a diverse and global community

Assessing Student Academic Achievement
Muskegon Community College is fully accredited by the Higher Learning Commission. Accreditation helps ensure students that they are receiving a quality education and can transfer to other colleges and universities with ease and confidence. MCC is committed to an essential part of the accreditation process: assessing student learning.

Credit Hours
A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement. Academic credit for each course is approved and assigned by the Instructional Affairs Council and the Coordinating Council. This information is published in the MCC catalog, the class schedule, and the online student registration system.

The standard of class time shall be one hour of class and two hours of out-of-class (homework) student work per week over a semester.

Most colleges, including Muskegon Community College, require a semester credit hour to be not less than 800 instructional minutes.

Muskegon Community College follows a semester schedule for its academic programs. In addition to a fall and winter semester of fifteen weeks, the College offers a twelve-week summer session.

Program length is determined by the number of credits required for each degree. All Associate in Science and Arts (ASA), Associate in Applied Science (AAS), Associate in Science and Associate in General Studies (AGS) degrees require at least 62 credits with the exception of some secondary admit programs. A full-time student could complete an Associate’s degree in two years, provided the classes are available in the correct sequence for the student. The College also offers a variety of certificate programs, which require fewer credits than the degrees.
Contact Hours
Tuition is assessed on the number of weekly contact hours. The contact hours for a course are the number of hours per week a course meets. The definition of a contact hour is a total of 55 minutes of student instruction in which the student comes into contact with an instructor or with tutorial or laboratory equipment.

Laboratory
For laboratory experiences where the contact hours exceed the number of credit hours for a course, the academic department will decide, based on past experience, how much of the designated contact time will be devoted to lecture or classroom activities, and how much contact time will be devoted to laboratory experiences. This information will be spelled out in the class syllabus. For every one hour of laboratory time per week, the students will be responsible to complete two hours of outside student learning activities or homework for the length of the semester.

Distance Education
For online or hybrid classes, the same 55 minute credit and contact requirement for regular classes will be followed. For online classes, the standard of class time shall be one hour of instructor designed and facilitated online instruction and two hours student work per week over a semester. For hybrid classes, the hour of standard class-time will be partly met face to face and partly met through online instruction; with the same additional two hours of student work expected.

Internships
For internship experiences, one credit is equal to 60 hours of supervised training or work experience. Students can earn 1-5 credits through a documented and approved internship experience. Visit www.muskegoncc.edu/internships for more information.

For distance education, academic engagement is defined as, but not limited to: asynchronous or synchronous lecture presentation; an interactive tutorial, or computer-assisted instruction; attending a study group that was assigned by the institution; contributing to an academic online discussion; submitting an academic assignment; taking an exam; and initiating contact with a faculty member to ask a question about the academic subject studied in the course. Merely logging into an online class does not constitute academic engagement or attendance. Each faculty member shall maintain an accurate record of attendance for each student enrolled in each of the faculty member’s classes, while also defining “online attendance” in their distance learning courses.

For more detailed information, go to www.muskegoncc.edu/online-instruction/about-distance-education/
**MCC Academic Degrees and Certificates**

**Associate in Science and Arts Degree & Associate in Science Degree**
These degrees are for students intending to transfer to a four-year college or university. If you wish to major in a program that requires a bachelor’s degree, such as Social Work or Computer Science, the courses you need to take are outlined in the transfer guides available online at www.muskegoncc.edu. These programs are planned to enable students to transfer to bachelor degree-granting colleges and universities with advanced standing. Students graduating from Muskegon Community College with an Associate in Science and Arts or an Associate in Science are generally admitted to the bachelor degree-granting institutions with junior year standing.

Electives are courses a student chooses, in addition to the other degree requirements, based on the anticipated major and the transfer school the student will be attending. Electives should be chosen carefully, with the advice of a MCC counselor who will provide a student with a transfer guide that lists specific courses four-year schools recommend students take at the community college level.

To meet the College’s technology goals, students are strongly recommended to complete CIS 110 and 120A.

For students uncertain about their major, the College recommends completing the General Education Requirements first. All students, regardless of major, must complete the general education requirements.

Students planning to transfer to a four-year college in Michigan may find a great deal of information at www.mitransfer.org.

**Associate in Science Degree**
This degree is for students intending to transfer to a four-year college or university in Engineering. This program includes general education courses necessary to satisfy the Michigan Transfer Agreement (MTA). The core courses will develop understanding of abstract mathematics, introductory physics and engineering, and other related disciplines.

**Associate in Applied Science Degree**
If you wish to major in an occupational program that requires two years of study, such as Electronics or Administrative Assistant, the courses you need to take are outlined in this catalog. You will want to pursue the Associate in Applied Science Degree. The Associate in Applied Science Programs were designed in conjunction with active advisory committees, so that a student may reasonably expect employment upon successful completion of the degree. The Associate in Applied Science Degree may also be used as a transfer degree to a limited number of baccalaureate programs, but it is not specifically designed to transfer to four-year colleges or universities.

**Associate in General Studies Degree**
This degree is designed for students interested in self-enrichment who are not following a specific occupational or transfer program. Courses may be selected to suit the individual student’s goals. All students must meet with a MCC counselor prior to enrolling in this program.

**Diplomas and Certificates**
Certificates are offered in many of the same occupationally-oriented programs as the Associate in Applied Science Degrees. They are not as comprehensive and require fewer classes than a degree. Certificate programs were developed with the assistance of advisory committees, and students may reasonably expect employment upon completion of these programs.

It is strongly recommended that students see a MCC Counselor to develop a course plan for purposes of transferring to a four-year institution or obtaining a two-year degree or certificate.

Students returning to Muskegon Community College after an absence of THREE YEARS or LONGER will be under the requirements of the CURRENT CATALOG.
ASSOCIATE IN SCIENCE AND ARTS (ASA)  
with the Michigan Transfer Agreement

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category. This program may be completed 100% online, however not all classes in the program may be offered in an online format. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication – 6 credits with grades of “C” or better</td>
<td>American Culture – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>English – 101, 102</td>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td>Science – 6 credits with grades of “C” or better</td>
<td>Political Science - 111, 205, 220</td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects). Must include at least one lab science</td>
<td></td>
</tr>
</tbody>
</table>

| Lab classes: | |
| Biology - any MCC Biology course with a lab | |
| Chemistry - any MCC Chemistry course with a lab | |
| Environmental Science - ENV 110L&L | |
| Geography - 101A, 215 | |
| Geology - 101A, 102, 250Lab | |
| Physical Science - 101A | |
| Physics - 201CL&L, 202CL&L, 203L&L, 204L&L | |
| Non-Lab: | |
| Anthropology - 105D | |
| Astronomy - 101, 105A | |
| Biology - 115, 200, 207LEC, 250LEC | |
| Geography - 214, 260 | |
| Geology - 100, 201, 250LEC | |
| Math – 3 credits with grades of “C” or better | |
| Ethics and Logic – 3 credits with grades of “C” or better | |
| Philosophy - 101, 102, 104, 202, 203, 204, 205, 207 | |
| Social Relationships – 3 credits with grades of “C” or better | |
| Economics - 101A, 102A | |
| Psychology - 102, 201, 203, 207, 209, 210 | |
| Sociology - 101, 102A, 202A, 203, 205, 206 | |
| Women's Gender Studies - 101, 201 | |
| Western Culture -3 credits with grades of “C” or better | |
| Art - 198, 199, 202, 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231 | |
| History - 101, 102 | |
| Humanities - 195 | |
| Theater - 201 | |

| American Culture – 3 credits with grades of “C” or better | |
| History - 201, 202, 207, 211, 212B, 214, 220 | |
| Political Science - 111, 205, 220 | |
| International Culture – 3 credits with grades of “C” or better | |
| Anthropology - 103, 110 | |
| English - 207, 211, 218A | |
| French - 101, 102, 201, 202 | |
| Geography - 104, 105 | |
| German - 101, 102, 201, 202 | |
| History - 150, 151, 216 | |
| International Cultural Studies - 101GERA (Germany) | |
| Philosophy - 105 | |
| Political Science - 202, 210A, 210B, 211 | |
| Spanish - 101, 102, 201, 202 | |

| Aesthetic Values – 3 credits | |
| Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D | |
| English - 216, 223 | |
| Music classes numbered 100 and above except Music 240 | |
| Music-100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202 | |

| Physical Education – minimum 2 credits | |
| Choose ONE of the following options: | |
|Option 1: Physical Education Choose one of the following - 101A, 103, 104A, 118, 201 and any Physical Education, Dance, or Physical Education Professional 200 | |
|Option 2: Physical Education 121 | |

| Computer Competency | |
| Pass any 3-credit-hour or greater CIS class with a “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test. | |
| Electives – Minimum 27 credits, chosen from courses above, or others reflecting your major or personal interests. | |

52 - 2023 - 2024 Muskegon Community College Catalog
Michigan Transfer Agreement

The following courses may be taken at Muskegon Community College to fulfill the basic general education requirements at four-year colleges that participate in the Michigan Transfer Agreement (MTA). A grade of “C” or better is required in each course used to fulfill requirements of the Agreement. A minimum of one credit hour must be completed at Muskegon Community College. This list reflects only current classes; the Registrar’s Office maintains a historical listing of courses that are accepted as part of the Michigan Transfer Agreement.

<table>
<thead>
<tr>
<th>English/Communication – 2 courses</th>
<th>Humanities and Fine Arts - 2 courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong> – 101</td>
<td>Courses must be in two or more disciplines (subjects).</td>
</tr>
<tr>
<td>One course from:</td>
<td><strong>Art</strong> - 100A, 198, 199, 202</td>
</tr>
<tr>
<td><strong>English</strong> 102, <strong>Communications</strong> 101, 107, 201</td>
<td><strong>English</strong> - 200A, 201A, 205, 206, 207, 210, 211, 213, 216, 218A, 223, 225, 226, 227, 228, 231</td>
</tr>
<tr>
<td><strong>Natural Science – 2 courses</strong></td>
<td><strong>Foreign Language</strong> (all foreign languages count as one subject)</td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects).</td>
<td><strong>French</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td><strong>Must include at least one lab science</strong></td>
<td><strong>German</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td><strong>Lab classes:</strong></td>
<td><strong>Spanish</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td><strong>Biology</strong> – any MCC Biology course with a lab</td>
<td><strong>History</strong> - 101, 102, 150, 151, 216</td>
</tr>
<tr>
<td><strong>Chemistry</strong> – any MCC Chemistry course with a lab</td>
<td><strong>Humanities</strong> - 195</td>
</tr>
<tr>
<td><strong>Environmental Science</strong> - 110L&amp;L</td>
<td><strong>International Cultural Studies</strong> - 101 GERA (Germany)</td>
</tr>
<tr>
<td><strong>Geography</strong> - 101A, 215</td>
<td><strong>Music</strong> - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202</td>
</tr>
<tr>
<td><strong>Geology</strong> - 101A, 102, 250Lab</td>
<td><strong>Philosophy</strong> - 101, 102, 104, 105, 202, 203, 204, 205, 207</td>
</tr>
<tr>
<td><strong>Physics</strong> - 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td><strong>Thirty credits are required for the MTA – if courses selected do not total 30 credit hours (or more), additional courses must be taken from the MTA categories on this page.</strong></td>
</tr>
<tr>
<td><strong>Non-Lab:</strong></td>
<td><strong>A grade of “C” or better is required in each course used to fulfill the requirements of this Agreement.</strong></td>
</tr>
<tr>
<td><strong>Anthropology</strong> - 105D</td>
<td></td>
</tr>
<tr>
<td><strong>Astronomy</strong> - 101, 105A</td>
<td></td>
</tr>
<tr>
<td><strong>Biology</strong> - 115, 200, 207LEC, 250LEC</td>
<td></td>
</tr>
<tr>
<td><strong>Geography</strong> - 214, 260</td>
<td></td>
</tr>
<tr>
<td><strong>Geology</strong> - 100, 201, 250LEC</td>
<td></td>
</tr>
<tr>
<td><strong>Math – 1 course</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Social Sciences - 2 courses</strong></td>
<td></td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects).</td>
<td></td>
</tr>
<tr>
<td><strong>Anthropology</strong> - 103, 110</td>
<td></td>
</tr>
<tr>
<td><strong>Economics</strong> - 101A, 102A</td>
<td></td>
</tr>
<tr>
<td><strong>Geography</strong> - 104, 105</td>
<td></td>
</tr>
<tr>
<td><strong>History</strong> – 201, 202, 207, 211, 212B, 214, 220</td>
<td></td>
</tr>
<tr>
<td><strong>Political Science</strong> – 111, 202, 205, 210A, 210B, 211, 220</td>
<td></td>
</tr>
<tr>
<td><strong>Psychology</strong> - 102, 201, 203, 207, 209, 210</td>
<td></td>
</tr>
<tr>
<td><strong>Sociology</strong> - 101, 102A, 202A, 203, 205, 206</td>
<td></td>
</tr>
<tr>
<td><strong>Women’s Gender Studies</strong> - 101, 201</td>
<td></td>
</tr>
</tbody>
</table>
## Associate in Science and Arts (ASA) in Broadcasting and Multimedia/Performance with Michigan Transfer Agreement

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree. Courses numbered below 100 do not count toward the ASA. MCC and the Michigan Transfer Agreement require a “C” or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of “C” or better are noted on this guide. Individual courses within other groups may also require a “C” or better; these courses are noted by **boldface** type.

### General Education Requirements

**Minimum – 35 credits**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>6 credits</td>
<td>with grades of “C” or better</td>
</tr>
<tr>
<td>English</td>
<td>- 101, 102</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>6 credits</td>
<td>with grades of “C” or better</td>
</tr>
<tr>
<td>Biology</td>
<td>- any MCC Biology course with a lab</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>- any MCC Chemistry course with a lab</td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>- 110L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>- 101A, 214, 215</td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td>- 101A, 102, 250Lab</td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td>- 101A</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>- 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Lab classes:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>- any MCC Biology course with a lab</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>- any MCC Chemistry course with a lab</td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>- 110L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>- 101A, 214, 215</td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td>- 101A, 102, 250Lab</td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td>- 101A</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>- 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Non-Lab:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>- 105D</td>
<td></td>
</tr>
<tr>
<td>Astronomy</td>
<td>- 101, 105A</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>- 200, 207 – lecture only</td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td>- 100, 201</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>- 214, 260</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>- 3 credits</td>
<td>with grades of “C” or better</td>
</tr>
<tr>
<td>Ethics and Logic</td>
<td>- 3 credits</td>
<td>with grades of “C” or better</td>
</tr>
<tr>
<td>Philosophy</td>
<td>- 101, 102, 104, 202, 203, 204, 205, 207</td>
<td></td>
</tr>
<tr>
<td>Social Relationships</td>
<td>- 3 credits</td>
<td>with grades of “C” or better</td>
</tr>
<tr>
<td>Economics</td>
<td>- 101A, 102A</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>- 102, 201, 203, 207, 209, 210</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>- 101, 102A, 202A, 203, 205, 206</td>
<td></td>
</tr>
<tr>
<td>Women's Gender Studies</td>
<td>- 101, 201</td>
<td></td>
</tr>
<tr>
<td>Western Culture</td>
<td>- 3 credits</td>
<td>with grades of “C” or better</td>
</tr>
<tr>
<td>Art</td>
<td>- 198, 199, 202</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>- 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>- 101, 102</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>- 195</td>
<td></td>
</tr>
<tr>
<td>Theater</td>
<td>- 201</td>
<td></td>
</tr>
<tr>
<td>American Culture</td>
<td>- 3 credits</td>
<td>with grades of “C” or better</td>
</tr>
<tr>
<td>History</td>
<td>- 201, 202, 207, 211, 212B, 214, 220</td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>- 111, 205, 220</td>
<td></td>
</tr>
<tr>
<td>International Culture</td>
<td>- 3 credits</td>
<td>with grades of “C” or better</td>
</tr>
<tr>
<td>Anthropology</td>
<td>- 103, 110</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>- 207, 211, 218A</td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>- 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>- 104, 105</td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>- 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>- 150, 151, 216</td>
<td></td>
</tr>
<tr>
<td>International Cultural Studies</td>
<td>- 101GER (Germany)</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>- 105</td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>- 202, 210A, 210B, 211</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>- 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Aesthetic Values</td>
<td>- 3 credits</td>
<td>with a grade of “C” or better</td>
</tr>
<tr>
<td>Theater</td>
<td>- 160</td>
<td></td>
</tr>
<tr>
<td>Physical Education and Health</td>
<td>- 2 credits</td>
<td></td>
</tr>
<tr>
<td>One credit must be from:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>- 101A, 103, 104A, 118, 201</td>
<td></td>
</tr>
<tr>
<td>One credit from:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>any Physical Education or Dance course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Or PEA 121</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Broadcasting & Multimedia/Performance Requirements - 25 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101</td>
<td>Oral Communications</td>
</tr>
<tr>
<td>COM 102</td>
<td>Mass Media</td>
</tr>
<tr>
<td>COM 107</td>
<td>Introduction to Journalism</td>
</tr>
<tr>
<td>COM 112</td>
<td>Audio Production</td>
</tr>
<tr>
<td>COM 113</td>
<td>Practical Radio</td>
</tr>
<tr>
<td>COM 201</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>COM 212</td>
<td>Television Production</td>
</tr>
<tr>
<td>BUS 263</td>
<td>Advertising Dynamics</td>
</tr>
<tr>
<td>CIS 119PP</td>
<td>Introduction to Presentation Graphics</td>
</tr>
<tr>
<td>CIS 287A</td>
<td>Digital Video Editing</td>
</tr>
</tbody>
</table>

Choose one from the following (must complete with a grade of “C” or better):

- **CIS 110** - Computer Concepts
- **CIS 120A** - Intro to Computer Information Systems

Choose one from:

- **TH 102** - Introduction to Acting
- **TH 203** - Readers Theater

### Recommended Electives - Minimum 2 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 263</td>
<td>Advertising Dynamics</td>
</tr>
<tr>
<td>CIS 119PP</td>
<td>Introduction to Presentation Graphics</td>
</tr>
<tr>
<td>CIS 287A</td>
<td>Digital Video Editing</td>
</tr>
<tr>
<td>COM 203</td>
<td>Introduction to Cinema</td>
</tr>
<tr>
<td>COM 290CI</td>
<td>Cooperative Internship</td>
</tr>
<tr>
<td>ENG 222</td>
<td>Creative Writing</td>
</tr>
<tr>
<td>GRD 120</td>
<td>Introduction to Graphic Design</td>
</tr>
</tbody>
</table>
Associate in Science and Arts (ASA) in Criminal Justice/Corrections with Michigan Transfer Agreement

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree. Courses numbered below 100 do not count toward the ASA. MCC and the Michigan Transfer Agreement require a “C” or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of “C” or better are noted on this guide. Individual courses within other groups may also require a “C” or better; these courses are noted by **boldface** type.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong> – 6 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>English – 101, 102</td>
<td></td>
</tr>
<tr>
<td><strong>Science</strong> – 6 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects).</td>
<td></td>
</tr>
<tr>
<td><strong>Lab classes:</strong></td>
<td></td>
</tr>
<tr>
<td>Biology – any MCC Biology course with a lab</td>
<td></td>
</tr>
<tr>
<td>Chemistry – any MCC Chemistry course with a lab</td>
<td></td>
</tr>
<tr>
<td>Environmental Science - 110L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Geography - 101A, 215</td>
<td></td>
</tr>
<tr>
<td>Geology - 101A, 102</td>
<td></td>
</tr>
<tr>
<td>Physical Science - 101A</td>
<td></td>
</tr>
<tr>
<td>Physics - 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td></td>
</tr>
<tr>
<td><strong>Non-Lab:</strong></td>
<td></td>
</tr>
<tr>
<td>Anthropology - 105D</td>
<td></td>
</tr>
<tr>
<td>Astronomy - 101, 105A</td>
<td></td>
</tr>
<tr>
<td>Biology - 115, 200, 207LEC, 250LEC</td>
<td></td>
</tr>
<tr>
<td>Geology - 100, 201, 250LEC</td>
<td></td>
</tr>
<tr>
<td>Geography - 214, 260</td>
<td></td>
</tr>
<tr>
<td><strong>Math</strong> – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td><strong>Ethics and Logic</strong> – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Philosophy 101, 102, 104, 202, 203, 204, 205, 207</td>
<td></td>
</tr>
<tr>
<td><strong>Social Relationships</strong> – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Economics - 101A, 102A</td>
<td></td>
</tr>
<tr>
<td>Psychology - 102, 201, 203, 207, 209, 210</td>
<td></td>
</tr>
<tr>
<td>Sociology - 101, 102A, 202A, 203, 206</td>
<td></td>
</tr>
<tr>
<td>Women’s Gender Studies - 101, 201</td>
<td></td>
</tr>
<tr>
<td><strong>Western Culture</strong> – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Art - 198, 199, 202</td>
<td></td>
</tr>
<tr>
<td>English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231</td>
<td></td>
</tr>
<tr>
<td>History - 101, 102</td>
<td></td>
</tr>
<tr>
<td>Humanities - 195</td>
<td></td>
</tr>
<tr>
<td>Theater - 201</td>
<td></td>
</tr>
<tr>
<td><strong>American Culture</strong> – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
<td></td>
</tr>
<tr>
<td>Political Science - 111, 205, 220</td>
<td></td>
</tr>
<tr>
<td><strong>International Culture</strong> – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Anthropology - 103, 110</td>
<td></td>
</tr>
<tr>
<td>English - 207, 211, 218A</td>
<td></td>
</tr>
<tr>
<td>French - 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Geography - 104, 105</td>
<td></td>
</tr>
<tr>
<td>German - 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>History - 150, 151, 216</td>
<td></td>
</tr>
<tr>
<td>Philosophy - 105</td>
<td></td>
</tr>
<tr>
<td>Political Science - 202, 210A, 210B, 211</td>
<td></td>
</tr>
<tr>
<td>Spanish - 101, 201, 202</td>
<td></td>
</tr>
<tr>
<td><strong>Aesthetic Values</strong> – 3 credits (those courses requiring a “C” or better are in bold)</td>
<td></td>
</tr>
<tr>
<td>Dance - 100, 101, 102, 200, 201, 206, 210A, 210B, 210B</td>
<td></td>
</tr>
<tr>
<td>English - 216, 223</td>
<td></td>
</tr>
<tr>
<td>Music classes numbered 100 and above except Music 240 and 193</td>
<td></td>
</tr>
<tr>
<td>Music - 100, 101, 102, 103A, 192, 194, 195, 201, 202</td>
<td></td>
</tr>
<tr>
<td><strong>Physical Education</strong> – 2 credits</td>
<td></td>
</tr>
<tr>
<td>One credit must be from:</td>
<td></td>
</tr>
<tr>
<td><strong>Physical Education</strong> - 101A, 103, 104A, 118, 201</td>
<td></td>
</tr>
<tr>
<td>One credit from: any Physical Education or Dance course</td>
<td></td>
</tr>
</tbody>
</table>
### Computer Competency

Any 3-credit hour or greater CIS class with a “C” or better, or MCC’s CIS 110/120A Computer Competency Test.

### Criminal Justice Requirements - 15 credits  
**Must complete all with a grade of “C” or better**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 101</td>
<td>Introduction to Law Enforcement</td>
</tr>
<tr>
<td>CJ 102</td>
<td>Police Administration I</td>
</tr>
<tr>
<td>CJ 104</td>
<td>Criminology</td>
</tr>
<tr>
<td>CJ 109</td>
<td>Crime prevention and Juvenile Delinquency</td>
</tr>
<tr>
<td>CJ 201</td>
<td>Criminal Law</td>
</tr>
<tr>
<td>CJ 250</td>
<td>Introduction to Corrections</td>
</tr>
<tr>
<td>CJ 251A</td>
<td>Legal Issues in Corrections</td>
</tr>
<tr>
<td>CJ 252A</td>
<td>Correctional Institutions/Facilities</td>
</tr>
<tr>
<td>CJ 257</td>
<td>Client Relations in Corrections</td>
</tr>
<tr>
<td>CJ 258A</td>
<td>Client Growth and Development</td>
</tr>
</tbody>
</table>

### Criminal Justice Electives - 12 credits

Select a minimum of four courses from the following options. Must complete all with a “C” or better.
Associate in Science and Arts (ASA) in Criminal Justice/Law Enforcement with Michigan Transfer Agreement

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree. Courses numbered below 100 do not count toward the ASA. MCC and the Michigan Transfer Agreement require a “C” or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of “C” or better are noted on this guide. Individual courses within other groups may also require a “C” or better; these courses are noted by **boldface** type.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong> – 6 credits with grades of “C” or better</td>
<td><strong>Western Culture</strong> -3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>English – 101, 102</td>
<td>Art - 198, 199, 202</td>
</tr>
<tr>
<td><strong>Science</strong> – 6 credits with grades of “C” or better</td>
<td>English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231</td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects). Must include at least one lab science</td>
<td>History - 101, 102, 204</td>
</tr>
<tr>
<td><strong>Lab classes:</strong></td>
<td>Humanities - 195</td>
</tr>
<tr>
<td>Biology - any MCC Biology course with a lab</td>
<td>Theater - 201</td>
</tr>
<tr>
<td>Chemistry - any MCC Chemistry course with a lab</td>
<td><strong>American Culture</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Environmental Science - 110L&amp;L</td>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td>Geography - 101A, 215</td>
<td>Political Science - 111, 205, 220</td>
</tr>
<tr>
<td>Geology - 101A, 102</td>
<td><strong>International Culture</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Physical Science - 101A</td>
<td>Anthropology - 103, 110</td>
</tr>
<tr>
<td>Physics - 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td>English - 207, 211, 218A</td>
</tr>
<tr>
<td>Non-Lab:</td>
<td>French - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Anthropology - 105D</td>
<td>Geography - 104, 105</td>
</tr>
<tr>
<td>Astronomy - 101, 105A</td>
<td>German - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Biology - 115, 200, 207LEC, 250LEC</td>
<td>History - 150, 151, 216</td>
</tr>
<tr>
<td>Geology - 100, 201, 250LEC</td>
<td>Philosophy - 105</td>
</tr>
<tr>
<td>Geography - 214, 260</td>
<td>Political Science - 202, 210A, 210B, 211</td>
</tr>
<tr>
<td><strong>Math</strong> – 3 credits with grades of “C” or better</td>
<td>Spanish - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Math - 107A, 109A, 115A, 141, 162A, 215A, 276, 283, 295</td>
<td><strong>Aesthetic Values</strong> – 3 credits (those courses requiring a “C” or better are in bold)</td>
</tr>
<tr>
<td><strong>Ethics and Logic</strong> – 3 credits with grades of “C” or better</td>
<td><strong>Art</strong> - 100A, 101, 102, 102A, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 220</td>
</tr>
<tr>
<td>Philosophy - 101, 102, 104, 202, 203, 204, 205, 207</td>
<td><strong>Dance</strong> - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 213, 217, 260</td>
</tr>
<tr>
<td><strong>Social Relationships</strong> – 3 credits with grades of “C” or better</td>
<td>English - 216, 223</td>
</tr>
<tr>
<td>Economics - 101A, 102A</td>
<td>Music classes numbered 100 and above except Music 240 and 193</td>
</tr>
<tr>
<td>Psychology - 102, 201, 203, 207, 209, 210</td>
<td><strong>Music</strong> - 100, 101, 102, 103A, 192, 194, 195, 201, 202</td>
</tr>
<tr>
<td><strong>Women’s Gender Studies</strong> - 101, 201</td>
<td><strong>Physical Education and Health</strong> – 2 credits</td>
</tr>
<tr>
<td></td>
<td>One credit must be from:</td>
</tr>
<tr>
<td></td>
<td><strong>Physical Education</strong> - 101A, 103, 104A, 118, 201</td>
</tr>
<tr>
<td></td>
<td>One credit from: any Physical Education or Dance course or HE 100A</td>
</tr>
</tbody>
</table>

58 - 2023 - 2024 Muskegon Community College Catalog
### Programs

#### Computer Competency

Any 3-credit hour or greater CIS class with a “C” or better, or MCC’s CIS 110/120A Computer Competency Test.

<table>
<thead>
<tr>
<th>Criminal Justice - Law Enforcement Requirements – 15 Credits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CJ 101 – Introduction to Law Enforcement</strong></td>
<td><strong>CJ 109 – Crime Prevention and Juvenile Delinquency</strong></td>
</tr>
<tr>
<td><strong>CJ 102 – Police Administration I</strong></td>
<td><strong>CJ 201 – Criminal Law</strong></td>
</tr>
<tr>
<td><strong>CJ 104 – Criminology</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Criminal Justice - Law Enforcement Approved Electives

Select a minimum of four courses from the following options:

Must complete all with grades of “C” or better.

<table>
<thead>
<tr>
<th>CJ 202 – Police Administration II</th>
<th>CJ 206 – Evidence and Criminal Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 204 – Criminal Investigation</td>
<td>CJ 207 – Police and Community Relations</td>
</tr>
<tr>
<td>CJ 205 – Interrogation and Case Preparation</td>
<td>CJ 208 – Police Science Laboratory I</td>
</tr>
</tbody>
</table>
Associate in Science and Arts (ASA) in Early Childhood Education with Michigan Transfer Agreement

Students are focused on understanding the development of children from birth to eight years of age through hands-on practical fieldwork and classroom instruction. An emphasis will be placed on an anti-bias curriculum covering the physical, intellectual, emotional and social domains of development. Students will be prepared for the Child Development Associate (CDA) assessment process, as part of the national credential awarded by the Council for Professional Recognition. The degree prepares students to be preschool teachers, child care center directors, Head Start teachers, teacher aides and classroom assistants. In addition it fulfills the Michigan Transfer Agreement (MTA) requirement and as part of the B-K and Pre-K to 3rd grade band studies for elementary teaching credential. All Education courses must be completed with a grade of “C” or better. This program may be completed 100% online, however not all classes in the program may be offered in an online format. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

### General Education Requirements

<table>
<thead>
<tr>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication – 6 credits with grades of “C” or better</td>
</tr>
<tr>
<td>English – 101, 102</td>
</tr>
<tr>
<td>Science – 6 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects). Must include at least one lab science</td>
</tr>
<tr>
<td>Lab classes:</td>
</tr>
<tr>
<td>Biology – any MCC Biology course with a lab</td>
</tr>
<tr>
<td>Chemistry – any MCC Chemistry course with a lab</td>
</tr>
<tr>
<td>Environmental Science - 110L&amp;L</td>
</tr>
<tr>
<td>Geography - 101A, 215</td>
</tr>
<tr>
<td>Geology - 101A, 102</td>
</tr>
<tr>
<td>Physical Science - 101A</td>
</tr>
<tr>
<td>Physics - 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
</tr>
<tr>
<td>Non-Lab:</td>
</tr>
<tr>
<td>Anthropology - 105D</td>
</tr>
<tr>
<td>Astronomy - 101, 105A</td>
</tr>
<tr>
<td>Biology - 115, 200, 207LEC, 250LEC</td>
</tr>
<tr>
<td>Geology - 201</td>
</tr>
<tr>
<td>Geography - 214, 260</td>
</tr>
<tr>
<td>Math – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Ethics and Logic – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Philosophy - 101, 102, 104, 202, 203, 204, 205, 207</td>
</tr>
<tr>
<td>Social Relationships – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Economics - 101A, 102A</td>
</tr>
<tr>
<td>Psychology - 102, 201, 203, 207, 209, 210</td>
</tr>
<tr>
<td>Sociology - 101, 102A, 202A, 203, 206, 211</td>
</tr>
<tr>
<td>Women’s Gender Studies - 101, 201</td>
</tr>
<tr>
<td>Western Culture - 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Art - 198, 199, 202</td>
</tr>
<tr>
<td>English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231</td>
</tr>
<tr>
<td>History - 101, 102</td>
</tr>
<tr>
<td>Humanities - 195</td>
</tr>
<tr>
<td>Theater - 201</td>
</tr>
<tr>
<td>American Culture – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td>Political Science - 111, 205, 220</td>
</tr>
<tr>
<td>International Culture – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Anthropology - 103, 110</td>
</tr>
<tr>
<td>English - 207, 211, 218A</td>
</tr>
<tr>
<td>French - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Geography - 104, 105</td>
</tr>
<tr>
<td>German - 101, 102, 201, 202</td>
</tr>
<tr>
<td>History - 150, 151, 216</td>
</tr>
<tr>
<td>International Cultural Studies - 101GER (Germany)</td>
</tr>
<tr>
<td>Philosophy - 105</td>
</tr>
<tr>
<td>Political Science - 202, 210A, 210B, 211</td>
</tr>
<tr>
<td>Spanish - 101, 102, 201, 202</td>
</tr>
</tbody>
</table>
### Programs

**Computer Competency**

Pass MCC’s Computer Competency Test, or pass any CIS class with a grade of “C” or better.

**Early Childhood Education Requirements 26 Credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 109A</td>
<td>Parent-Child Connection</td>
</tr>
<tr>
<td>ED 111A</td>
<td>Introduction to Education of Young Children</td>
</tr>
<tr>
<td>ED 120C</td>
<td>Early Childhood Education</td>
</tr>
<tr>
<td>ED 211A</td>
<td>Behavior Management</td>
</tr>
<tr>
<td>ED 214A</td>
<td>Infant &amp; Toddler Development and Care</td>
</tr>
<tr>
<td>ED 220B</td>
<td>Early Childhood Assessment</td>
</tr>
</tbody>
</table>

**Aesthetic Values – 3 credits (those courses requiring a “C” or better are in bold)**

- **Art**: 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 220
- **Dance**: 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D
- **English**: 216, 223
  - Music classes numbered 100 and above except Music 240 and 193
- **Music**: 100, 101, 102, 103A, 192, 194, 195, 201, 202
- **Theater**: 101, 102, 108, 121, 122, 141, 142, 144, 145, 147, 148, 160, 202, 203, 204, 212, 217, 260

*Must complete all with grades of “C” or better*

**ED 230A** - Children’s Literature

One of the following:

- **ED 225A** - Child Development (Age 0-8)
- **ED 250A** - Human Growth and Learning

**ED 210** - Child Care and Guidance

**ED 252B** - Child Development Practicum
Associate in Science and Arts (ASA) in
Health Science
with Michigan Transfer Agreement

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree. Courses numbered below 100 do not count toward the ASA. MCC and the Michigan Transfer Agreement require a “C” or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of “C” or better are noted on this guide.

### General Education Requirements

<table>
<thead>
<tr>
<th>Minimum – 35 credits</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication – 6 credits with grades of “C” or better</td>
<td>American Culture – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>English – 101, 102</td>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td>Science – 17 credits with grades of “C” or better</td>
<td>Political Science - 111, 205, 220</td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects). Must include at least one lab science</td>
<td>International Culture – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Lab classes: Biology – 152L&amp;L, 252L&amp;L, 207LEC and 207A</td>
<td>Anthropology - 103, 110</td>
</tr>
<tr>
<td>Choose one: Chemistry 100LEC and 100A</td>
<td>English - 207, 211, 218A</td>
</tr>
<tr>
<td>Chemistry 109LEC and 109A</td>
<td>French - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Math – 3 credits with grades of “C” or better</td>
<td>Geography - 104, 105</td>
</tr>
<tr>
<td>Ethics and Logic – 3 credits with grades of “C” or better</td>
<td>History - 150, 151, 216</td>
</tr>
<tr>
<td>Philosophy - 204</td>
<td>International Cultural Studies - 101GER (Germany)</td>
</tr>
<tr>
<td>Social Relationships – 3 credits with grades of “C” or better</td>
<td>Philosophy - 105</td>
</tr>
<tr>
<td>Psychology - 201</td>
<td>Political Science - 202, 210A, 210B, 211</td>
</tr>
<tr>
<td>Western Culture – 3 credits with grades of “C” or better</td>
<td>Spanish - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Art - 198, 199, 202</td>
<td>Aesthetic Values – 3 credits</td>
</tr>
<tr>
<td>History - 101, 102, 204</td>
<td>Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D</td>
</tr>
<tr>
<td>Humanities - 195</td>
<td>English - 216, 223</td>
</tr>
<tr>
<td>Theater - 201</td>
<td>Music classes numbered 100 and above except Music 240 and 193</td>
</tr>
<tr>
<td>Physical Education and Health – 2 credits</td>
<td>Music - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202</td>
</tr>
<tr>
<td>Physical Education - 101A and one credit from any Physical Education OR Dance course OR Physical Education 121</td>
<td></td>
</tr>
</tbody>
</table>

### Computer Competency

Pass any 3 credit hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.

### Electives - Minimum 15 credits

Choose additional courses from General Education courses listed above, or other courses related to your health science major.
Associate in Science and Arts (ASA) in Art Pathway with Michigan Transfer Agreement

The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication – 6 credits with grades of “C” or better</td>
<td>American Culture – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>English – 101, 102</td>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td>Science – 6 credits with grades of “C” or better</td>
<td>Political Science - 111, 205, 220</td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects). Must include at least one lab science</td>
<td></td>
</tr>
<tr>
<td>Lab classes:</td>
<td></td>
</tr>
<tr>
<td>Biology – any MCC Biology course with a lab</td>
<td></td>
</tr>
<tr>
<td>Chemistry – any MCC Chemistry course with a lab</td>
<td></td>
</tr>
<tr>
<td>Environmental Science - 110L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Geography - 101A, 215</td>
<td></td>
</tr>
<tr>
<td>Geology - 101A, 102, 250Lab</td>
<td></td>
</tr>
<tr>
<td>Physical Science - 101A</td>
<td></td>
</tr>
<tr>
<td>Physics - 201L&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Non-Lab:</td>
<td></td>
</tr>
<tr>
<td>Anthropology – 105D</td>
<td></td>
</tr>
<tr>
<td>Astronomy - 101, 105A</td>
<td></td>
</tr>
<tr>
<td>Biology - 115, 200, 207LEC, 250LEC</td>
<td></td>
</tr>
<tr>
<td>Geography - 214, 260</td>
<td></td>
</tr>
<tr>
<td>Geology - 100, 201, 250LEC</td>
<td></td>
</tr>
<tr>
<td>Math – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Ethics and Logic – 3 credits with grades of “C” or better</td>
<td>Physical Education and Health – minimum 2 credits</td>
</tr>
<tr>
<td>Philosophy - 101, 102, 104, 202, 203, 204, 205, 207</td>
<td>Choose One of the following options:</td>
</tr>
<tr>
<td>Social Relationships – 3 credits with grades of “C” or better</td>
<td>Option 1: PEA 101A, 103, 104A, 118, 201 and choose ONE PEA or Dance course</td>
</tr>
<tr>
<td>Economics - 101A, 102A</td>
<td>Option 2: PEA 121 (3 credit hours)</td>
</tr>
<tr>
<td>Psychology - 102, 201, 203, 207, 209, 210</td>
<td></td>
</tr>
<tr>
<td>Sociology - 101, 102A, 202A, 203, 205, 206</td>
<td></td>
</tr>
<tr>
<td>Women's Gender Studies - 101, 201</td>
<td></td>
</tr>
<tr>
<td>Western Culture - 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Art - 198</td>
<td></td>
</tr>
</tbody>
</table>

MCC and the MTA require a “C” or better in courses used to meet ASA and MTA requirements which are noted on this guide. Classes that may be used to fulfill MTA requirements are in bold.
### Recommended Elective - minimum 18 credits

- ART 106B Beginning Printmaking-Relief
- ART 107 Painting I
- ART 108 Ceramics I
- ART 109 Sculpture
- ART 118 Beginning Printmaking Intaglio
- ART 202 Contemporary Art History
- ART 204B Drawing II-Transf. Port. Prep
- ART 214 Photography 35MM Black/White
- ART 220 Figure Drawing

### Computer Competency

Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.

### Program Specific Courses - 9 credits with grades of “C” or better MUST take all classes

- ART 199
- ART 105B
- ART 117

Elective credits will be comprised of additional classes and required class credits earned in the general education requirements. It is recommended that students complete two studio art courses in two different mediums. **Please work with the MCC Pathway Counselor** and refer to the transfer guide from the 4-year institution to make sure that you select the appropriate courses to transfer.
## Associate in Science and Arts (ASA) in Biology Pathway with Michigan Transfer Agreement

The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category.

### General Education Requirements

<table>
<thead>
<tr>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong> – 6 credits with grades of “C” or better</td>
</tr>
<tr>
<td><strong>English</strong> – 101, 102</td>
</tr>
<tr>
<td><strong>Science</strong> – 6 credits with grades of “C” or better</td>
</tr>
<tr>
<td><strong>Lab classes:</strong></td>
</tr>
<tr>
<td>Biology – 130L&amp;L</td>
</tr>
<tr>
<td>Chemistry - 101LEC and Chemistry 101A</td>
</tr>
<tr>
<td><strong>Math</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Math - 109A, 115A, 141, 161, 162A, 283</td>
</tr>
<tr>
<td><strong>Ethics and Logic</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Philosophy - 101, 102, 104, 202, 203, 204, 205, 207</td>
</tr>
<tr>
<td><strong>Social Relationships</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Economics - 101A, 102A</td>
</tr>
<tr>
<td>Psychology - 102, 201, 203, 207, 208, 209, 210</td>
</tr>
<tr>
<td>Sociology - 101, 102A, 202A, 203, 205, 206</td>
</tr>
<tr>
<td>Women's Gender Studies - 101, 201</td>
</tr>
<tr>
<td><strong>Western Culture</strong> - 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Art - 198, 199, 202</td>
</tr>
<tr>
<td>English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231</td>
</tr>
<tr>
<td>History - 101, 102</td>
</tr>
<tr>
<td>Humanities - 195</td>
</tr>
<tr>
<td>Theater - 201</td>
</tr>
<tr>
<td><strong>American Culture</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td>Political Science - 111, 205, 220</td>
</tr>
<tr>
<td><strong>International Culture</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Anthropology - 103, 110</td>
</tr>
<tr>
<td>English - 207, 211, 218A</td>
</tr>
<tr>
<td>French - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Geography - 104, 105</td>
</tr>
<tr>
<td>German - 101, 102, 201, 202</td>
</tr>
<tr>
<td>History - 150, 151, 216</td>
</tr>
<tr>
<td>International Cultural Studies - 101GER (Germany)</td>
</tr>
<tr>
<td>Philosophy - 105</td>
</tr>
<tr>
<td>Political Science - 202, 210A, 210B, 211</td>
</tr>
<tr>
<td>Spanish - 101, 102, 201, 202</td>
</tr>
<tr>
<td><strong>Aesthetic Values</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Dance - 100, 101, 102, 105B, 201, 206, 210A, 210B, 210C, 210D</td>
</tr>
<tr>
<td>English - 216, 223</td>
</tr>
<tr>
<td>Music classes numbered 100 and above except Music 240</td>
</tr>
<tr>
<td>Music - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202</td>
</tr>
<tr>
<td><strong>Physical Education and Health</strong> – minimum 2 credits</td>
</tr>
<tr>
<td>Choose One of the following options:</td>
</tr>
<tr>
<td><strong>Option 1</strong>: PEA 101A, 103, 104A, 118, 201 and choose ONE PEA or Dance course</td>
</tr>
<tr>
<td><strong>Option 2</strong>: PEA 121 (3 credit hours)</td>
</tr>
</tbody>
</table>

MCC and the MTA require a “C” or better in courses used to meet ASA and MTA requirements, which are noted on this guide. Classes that may be used to fulfill MTA requirements are in bold.
**Program Specific Courses** - 19 credits with grades of “C” or better. MUST take all classes

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 131L&amp;L</td>
</tr>
<tr>
<td>Chemistry - 102LEC</td>
</tr>
<tr>
<td>Chemistry - 102A</td>
</tr>
<tr>
<td>Chemistry - 201E</td>
</tr>
<tr>
<td>Chemistry - 201F</td>
</tr>
<tr>
<td>Chemistry - 202F</td>
</tr>
<tr>
<td>Chemistry - 202G</td>
</tr>
</tbody>
</table>

**Computer Competency**

Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.

**Electives** - Minimum 8 Credits

Elective credits will be comprised of additional required class credits earned in the general education requirements.
Associate in Science and Arts (ASA) in Business Pathway with Michigan Transfer Agreement

The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline. A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category. This program may be completed 100% online, however not all classes in the program may be offered in an online format. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>American Culture – 3 credits with grades of “C” or better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication – 6 credits with grades of “C” or better</td>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td>English – 101, 102</td>
<td>Political Science - 111, 205, 220</td>
</tr>
<tr>
<td>Science – 6 credits with grades of “C” or better</td>
<td>International Culture – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects). Must include at least one lab science</td>
<td></td>
</tr>
<tr>
<td>Lab classes:</td>
<td></td>
</tr>
<tr>
<td>Biology – any MCC Biology course with a lab</td>
<td>Anthropology - 103, 110</td>
</tr>
<tr>
<td>Chemistry – any MCC Chemistry course with a lab</td>
<td>English - 207, 211, 218A</td>
</tr>
<tr>
<td>Environmental Science - 110L&amp;L</td>
<td>French - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Geography - 101A, 215</td>
<td>Geography - 104, 105</td>
</tr>
<tr>
<td>Geology - 101A, 102, 250Lab</td>
<td>German - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Physical Science - 101A</td>
<td>History - 150, 151, 216</td>
</tr>
<tr>
<td>Physics - 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td>International Cultural Studies - 101GER (Germany)</td>
</tr>
<tr>
<td>Non-Lab:</td>
<td></td>
</tr>
<tr>
<td>Anthropology – 105D</td>
<td>Philosophy - 105</td>
</tr>
<tr>
<td>Astronomy - 101, 105A</td>
<td>Political Science - 202, 210A, 210B, 211</td>
</tr>
<tr>
<td>Biology - 115, 200, 207LEC, 250LEC</td>
<td>Spanish - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Geography - 214, 260</td>
<td></td>
</tr>
<tr>
<td>Geology - 100, 201, 250LEC</td>
<td></td>
</tr>
<tr>
<td>Math – 3 credits with grades of “C” or better</td>
<td>Aesthetic Values – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Ethics and Logic – 3 credits with grades of “C” or better</td>
<td>Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D</td>
</tr>
<tr>
<td>Philosophy - 101, 102, 104, 202, 203, 204, 205, 207</td>
<td>English - 216, 223</td>
</tr>
<tr>
<td>Social Relationships – 3 credits with grades of “C” or better</td>
<td>Music classes numbered 100 and above except Music 240</td>
</tr>
<tr>
<td>Economics - 101A</td>
<td>Music - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202</td>
</tr>
<tr>
<td>Western Culture - 3 credits with grades of “C” or better</td>
<td>Theater - 101, 102, 108, 121, 122, 141, 142, 144, 145, 147, 148, 160, 202, 203, 204, 217, 260</td>
</tr>
<tr>
<td>Art - 198, 199, 202</td>
<td>Physical Education and Health – minimum 2 credits</td>
</tr>
<tr>
<td>English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231</td>
<td>Choose One of the following options:</td>
</tr>
<tr>
<td>History - 101, 102</td>
<td>Option 1: PEA 101A, 103, 104A, 118, 201 and choose ONE PEA or Dance course</td>
</tr>
<tr>
<td>Humanities -195</td>
<td>Option 2: PEA 121 (3 credit hours)</td>
</tr>
<tr>
<td>Theater - 201</td>
<td>MCC and the MTA require a “C” or better in courses used to meet ASA and MTA requirements, which are noted on this guide. Classes that may be used to fulfill MTA requirements are in bold.</td>
</tr>
<tr>
<td>Program Specific Courses - 15 credits with grades of “C” or better. MUST take all classes</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Accounting 201</td>
<td></td>
</tr>
<tr>
<td>Accounting 202</td>
<td></td>
</tr>
<tr>
<td>Economics 102A</td>
<td></td>
</tr>
<tr>
<td>Business 123</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Computer Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives - Minimum 12 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective credits will be comprised of additional classes and required class credits earned in the general education requirements. Please work with the MCC Pathway Counselor &amp; refer to the transfer guide from 4 year institution to select courses to transfer.</td>
</tr>
</tbody>
</table>
# Associate in Science and Arts (ASA) in Communications Pathway with Michigan Transfer Agreement

The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong></td>
<td>6 credits with grades of “C” or better</td>
</tr>
</tbody>
</table>
| **Science** | 6 credits with grades of “C” or better  
Courses must be in two or more disciplines (subjects). Must include at least one lab science |
| **Lab classes**:  
Biology | any MCC Biology course with a lab  
Chemistry | any MCC Chemistry course with a lab  
Environmental Science | 110L&L  
Geography | 101A, 215  
Geology | 101A, 102, 250lab  
Physical Science | 101A  
Physics | 201CL&L, 202CL&L, 203L&L, 204L&L |
| **Non-Lab** |  
Anthropology | 105D  
Astronomy | 101, 105A  
Biology | 115, 200, 207LEC, 250LEC  
Geography | 214, 260  
Geology | 100, 201, 250LEC |
| **Math** | 3 credits with grades of “C” or better |
| **Ethics and Logic** | 3 credits with grades of “C” or better |
| **Social Relationships** | 3 credits with grades of “C” or better |
| **Economics** | 101A, 102A  
Psychology | 102, 201, 203, 207, 209, 210  
Sociology | 101, 102A, 202A, 203, 205, 206  
Women’s Gender Studies | 101, 201 |
| **American Culture** | 3 credits with grades of “C” or better |
| **History** | 201, 202, 207, 211, 212B, 214, 220  
Political Science | 111, 205, 220 |
| **Western Culture** | 3 credits with grades of “C” or better |
| **Art** | 198, 199, 202  
English | 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231  
History | 101, 102  
Humanities | 195  
Theater | 201 |
| **International Culture** | 3 credits with grades of “C” or better |
| **Anthropology** | 103, 110  
English | 207, 211, 218A  
French | 101, 102, 201, 202  
Geography | 104, 105  
German | 101, 102, 201, 202  
History | 150, 151, 216  
International Cultural Studies | 101GER (Germany)  
Philosophy | 105  
Political Science | 202, 210A, 210B, 211  
Spanish | 101, 102, 201, 202 |
| **Aesthetic Values** | 3 credits with grades of “C” or better |
Dance | 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D |
| **English** | 216, 223  
Music classes numbered 100 and above except Music 240  
Music | 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202  
Theater | 101, 102, 108, 121, 122, 141, 142, 144, 145, 147, 148, 160, 202, 203, 204, 217, 260 |
| **Physical Education and Health** | minimum 2 credits |
| Choose One of the following options:  
Option 1: PEA 101A, 103, 104A, 118, 201 and choose ONE PEA or Dance course  
Option 2: PEA 121 (3 credit hours)
MCC and the MTA require a “C” or better in courses used to meet ASA and MTA requirements, which are noted on this guide. Classes that may be used to fulfill MTA requirements are in bold.

**Program Specific Courses** - 3 credits with grades of “C” or better. MUST take all classes

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 201</td>
</tr>
</tbody>
</table>

**Computer Competency**

Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.

**Electives - Minimum 24 Credits**

Elective credits will be comprised of additional classes and required class credits earned in the general education requirements. Please work with the MCC Pathway Counselor & refer to the transfer guide from 4 year institution to select courses to transfer.

**Recommended Elective**

COM 101 Oral Communications
Associate in Science and Arts (ASA) in Criminal Justice Pathway with Michigan Transfer Agreement

The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline. A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category. This program may be completed 100% online, however not all classes in the program may be offered in an online format. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

General Education Requirements
Minimum – 35 credits

Communication – 6 credits with grades of “C” or better
American Culture – 3 credits with grades of “C” or better
English – 101, 102
History - 201, 202, 207, 211, 212B, 214, 220
Science – 6 credits with grades of “C” or better
Political Science - 111, 205, 220
Courses must be in two or more disciplines (subjects).
International Culture – 3 credits with grades of “C” or better
Must include at least one lab science
Lab classes:
Anthropology - 103, 110
Biology – any MCC Biology course with a lab
English - 207, 211, 218A
Chemistry – any MCC Chemistry course with a lab
French - 101, 102, 201, 202
Environmental Science - 110L&L
Geography - 104, 105
Geology - 101A, 102, 250Lab
German - 101, 102, 201, 202
Physical Science - 101A
History - 150, 151, 216
Physics - 201CL&L, 202CL&L, 203L&L, 204L&L
International Cultural Studies - 101GER (Germany)
Non-Lab:
Philosophy - 105
Anthropology – 105D
American Culture – 3 credits with grades of “C” or better
Astronomy - 101, 105A
History - 201, 202, 207, 211, 220
Biological Science – 110L&L
Political Science - 202, 210A, 210B, 211
Environmental Science - 110L&L
Spanish - 101, 102, 201, 202
Geography - 214, 260
Aesthetic Values – 3 credits
Geology - 214, 250L&L
Art - 100A, 104, 105B, 106B, 107, 108, 109, 117, 118,
Math – 3 credits with grades of “C” or better
204B, 207, 208, 209, 214, 215, 220
Math - 107A, 109A, 115A, 141,
Musical classes numbered 100 and above except Music 240
161, 162A, 215A, 276, 283, 295
Music - 100, 101, 102, 201, 202, 204, 205, 207
Philosophy - 101, 102, 104, 202, 203, 204, 205, 207
Psychology - 201
Aesthetic Values – 3 credits
Social Relationships – 3 credits with grades of “C” or better
Choose One of the following options:
Western Culture - 3 credits with grades of “C” or better

Option 1: PEA 101A, 103, 104A, 118, 201 and choose
Art - 198, 199, 202
ONE PEA or Dance course
English - 200A, 201A, 205, 206, 210, 213, 225, 226,
History - 101, 102
227, 228, 231
Humanities -195
Dance - 100, 101, 102, 201, 202, 204, 210A, 210B,
Theater - 101, 102, 108, 121, 122, 141, 142, 144, 145,
147, 148, 160, 202, 203, 204, 217, 260
Physical Education and Health – minimum 2 credits
Option 2: PEA 121 (3 credit hours)
PEA and the MTA require a “C” or better in courses used to meet
Western Culture - 3 credits with grades of “C” or better
ASA and MTA requirements, which are noted on this guide. Classes
Art - 198, 199, 202
that may be used to fulfill MTA requirements are in bold.
English - 200A, 201A, 205, 206, 210, 213, 225, 226,
History - 101, 102
227, 228, 231
Humanities -195
Theater - 201
MCC and the MTA require a “C” or better in courses used to meet
ASA and MTA requirements, which are noted on this guide. Classes
that may be used to fulfill MTA requirements are in bold.
### Program Specific Courses - 9 credits with grades of “C” or better. MUST take all classes

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 101</td>
</tr>
<tr>
<td>CJ 250</td>
</tr>
<tr>
<td>SOC 101</td>
</tr>
</tbody>
</table>

### Computer Competency

Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.

### Electives - Minimum 18 Credits

Elective credits will be comprised of additional classes and required class credits earned in the general education requirements. Please work with the MCC Pathway Counselor & refer to the transfer guide from 4 year institution to select courses to transfer.
The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong> – 6 credits with grades of “C” or better</td>
<td><strong>American Culture</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td><strong>English</strong> – 101, 102</td>
<td><strong>History</strong> - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td><strong>Science</strong> – 6 credits with grades of “C” or better</td>
<td><strong>Political Science</strong> - 111, 205, 220</td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects). <strong>Must include at least one lab science</strong></td>
<td><strong>International Culture</strong> – 3 credits with grades of “C” or better</td>
</tr>
<tr>
<td><strong>Lab classes:</strong></td>
<td><strong>Anthropology</strong> - 103, 110</td>
</tr>
<tr>
<td><strong>Biology</strong> – BIOL 152 L&amp;L</td>
<td><strong>English</strong> - 207, 211, 218A</td>
</tr>
<tr>
<td><strong>Chemistry</strong> – CHEM 100LEC and CHEM 100A</td>
<td><strong>French</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td><strong>Math</strong> – 3 credits with grades of “C” or better</td>
<td><strong>Geography</strong> - 104, 105</td>
</tr>
<tr>
<td><strong>Math</strong> - 141, 161, 162A, 295</td>
<td><strong>German</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td><strong>Ethics and Logic</strong> – 3 credits with grades of “C” or better</td>
<td><strong>History</strong> - 150, 151, 216</td>
</tr>
<tr>
<td><strong>Philosophy</strong> - 101, 102, 104, 202, 203, 204, 205, 207</td>
<td><strong>International Cultural Studies</strong> - 101GER (Germany)</td>
</tr>
<tr>
<td><strong>Social Relationships</strong> – 3 credits with grades of “C” or better</td>
<td><strong>Philosophy</strong> - 105</td>
</tr>
<tr>
<td><strong>Psychology</strong> - 201</td>
<td><strong>Political Science</strong> - 202, 210A, 210B, 211</td>
</tr>
<tr>
<td><strong>Western Culture</strong> - 3 credits with grades of “C” or better</td>
<td><strong>Spanish</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td><strong>Art</strong> - 198, 199, 202</td>
<td><strong>Aesthetic Values</strong> – 3 credits</td>
</tr>
<tr>
<td><strong>History</strong> - 101, 102</td>
<td><strong>Dance</strong> - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D</td>
</tr>
<tr>
<td><strong>Humanities</strong> - 195</td>
<td><strong>English</strong> - 216, 223</td>
</tr>
<tr>
<td><strong>Theater</strong> - 201</td>
<td><em>Music classes numbered 100 and above except Music 240</em></td>
</tr>
<tr>
<td><strong>Physical Education and Health</strong> – minimum 2 credits</td>
<td><strong>Music</strong> - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202</td>
</tr>
<tr>
<td><strong>PEA 121</strong></td>
<td><strong>Theater</strong> - 101, 102, 108, 121, 122, 141, 142, 144, 145, 147, 148, 160, 202, 203, 204, 217, 260</td>
</tr>
</tbody>
</table>

MCC and the MTA require a “C” or better in courses used to meet ASA and MTA requirements, which are noted on this guide. Classes that may be used to fulfill MTA requirements are in bold.
**Program Specific Courses** - 9 credits with grades of “C” or better. MUST take all classes.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 252 L&amp;L</td>
</tr>
<tr>
<td>CHEM 101 Lec &amp; CHEM 101A</td>
</tr>
</tbody>
</table>

**Computer Competency**

Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test. Electives-Minimum 18 credits, chosen from courses above, or others reflecting your major or personal interests.

**Electives - Minimum 18 Credits**

Please work with the MCC Pathway Counselor & refer to the transfer guide from 4 year institution to select courses to transfer.
# Associate in Science and Arts (ASA) in Psychology Pathway with Michigan Transfer Agreement

The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline. A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category.

## General Education Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong></td>
<td></td>
</tr>
<tr>
<td>English – 101, 102</td>
<td></td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
</tr>
<tr>
<td>Science – 6 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Courses must be in two or more disciplines (subjects).</td>
<td></td>
</tr>
<tr>
<td>Must include at least one lab science</td>
<td></td>
</tr>
<tr>
<td><strong>Lab classes:</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 152L&amp;L is recommended</td>
<td></td>
</tr>
<tr>
<td>Biology – any MCC Biology course with a lab</td>
<td></td>
</tr>
<tr>
<td>Chemistry – any MCC Chemistry course with a lab</td>
<td></td>
</tr>
<tr>
<td>Environmental Science - 110L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Geography - 101A, 215</td>
<td></td>
</tr>
<tr>
<td>Geology - 101A, 102, 250lab</td>
<td></td>
</tr>
<tr>
<td>Physical Science - 101A</td>
<td></td>
</tr>
<tr>
<td>Physics - 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Non-Lab:</td>
<td></td>
</tr>
<tr>
<td>Anthropology – 105D</td>
<td></td>
</tr>
<tr>
<td>Astronomy - 101, 105A</td>
<td></td>
</tr>
<tr>
<td>Biology - 115, 200, 207LEC, 250LEC</td>
<td></td>
</tr>
<tr>
<td>Geography - 214, 260</td>
<td></td>
</tr>
<tr>
<td>Geology - 100, 201, 250LEC</td>
<td></td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Math - 115A</td>
<td></td>
</tr>
<tr>
<td><strong>Ethics and Logic</strong></td>
<td>3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Philosophy - 101, 102, 104, 202, 203, 204, 205, 207</td>
<td></td>
</tr>
<tr>
<td><strong>Social Relationships</strong></td>
<td>3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Psychology - 201</td>
<td></td>
</tr>
<tr>
<td><strong>Western Culture</strong></td>
<td>3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Art - 198, 199, 202</td>
<td></td>
</tr>
<tr>
<td>English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231</td>
<td></td>
</tr>
<tr>
<td>History - 101, 102</td>
<td></td>
</tr>
<tr>
<td>Humanities -195</td>
<td></td>
</tr>
<tr>
<td>Theater - 201</td>
<td></td>
</tr>
<tr>
<td><strong>American Culture</strong></td>
<td>3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
<td></td>
</tr>
<tr>
<td>Political Science - 111, 205, 220</td>
<td></td>
</tr>
<tr>
<td><strong>International Culture</strong></td>
<td>3 credits with grades of “C” or better</td>
</tr>
<tr>
<td>Anthropology - 103, 110</td>
<td></td>
</tr>
<tr>
<td>English - 207, 211, 218A</td>
<td></td>
</tr>
<tr>
<td>French - 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Geography - 104, 105</td>
<td></td>
</tr>
<tr>
<td>German - 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>History - 150, 151, 216</td>
<td></td>
</tr>
<tr>
<td>International Cultural Studies - 101GER(Germany)</td>
<td></td>
</tr>
<tr>
<td>Philosophy - 105</td>
<td></td>
</tr>
<tr>
<td>Political Science - 202, 210A, 210B, 211</td>
<td></td>
</tr>
<tr>
<td>Spanish - 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td><strong>Aesthetic Values</strong></td>
<td>3 credits</td>
</tr>
<tr>
<td>Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D</td>
<td></td>
</tr>
<tr>
<td>English - 216, 223</td>
<td></td>
</tr>
<tr>
<td>Music classes numbered 100 and above except Music 240</td>
<td></td>
</tr>
<tr>
<td><strong>Physical Education and Health</strong></td>
<td>Minimum 2 credits</td>
</tr>
<tr>
<td>Choose One of the following options:</td>
<td></td>
</tr>
<tr>
<td><strong>Option 1:</strong></td>
<td></td>
</tr>
<tr>
<td>PEA 101A, 103, 118, 201 and choose ONE PEA or Dance course</td>
<td></td>
</tr>
<tr>
<td><strong>Option 2:</strong></td>
<td></td>
</tr>
<tr>
<td>PEA 121 (3 credit hours)</td>
<td></td>
</tr>
</tbody>
</table>

MCC and the MTA require a “C” or better in courses used to meet ASA and MTA requirements, which are noted on this guide. Classes that may be used to fulfill MTA requirements are in bold.
### Program Specific Courses - 11 credits with grades of “C” or better MUST take all classes

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 203</td>
</tr>
<tr>
<td>PSYC 207</td>
</tr>
<tr>
<td>PSYC 210</td>
</tr>
</tbody>
</table>

### Computer Competency

Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.

### Electives - Minimum 16 Credits

Elective credits will be comprised of additional classes and required class credits earned in the general education requirements. Please work with the MCC Pathway Counselor & refer to the transfer guide from 4 year institution to select courses to transfer.
## Associate in Science and Arts (ASA) in Public Health Pathway with Michigan Transfer Agreement

The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category.

### General Education Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum – 35 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>6 credits with grades of “C” or better</td>
</tr>
<tr>
<td>English – 101, 102</td>
<td></td>
</tr>
<tr>
<td>Science – 6 credits with grades of “C” or better</td>
<td>Courses must be in two or more disciplines (subjects). Must include at least one lab science</td>
</tr>
<tr>
<td>Non-Lab</td>
<td></td>
</tr>
<tr>
<td>Biology – any MCC Biology course with a lab</td>
<td></td>
</tr>
<tr>
<td>Chemistry – any MCC Chemistry course with a lab</td>
<td></td>
</tr>
<tr>
<td>Environmental Science - 110L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Geography - 101A, 215</td>
<td></td>
</tr>
<tr>
<td>Geology - 101A, 102, 250lab</td>
<td></td>
</tr>
<tr>
<td>Physical Science - 101A</td>
<td></td>
</tr>
<tr>
<td>Physics - 201CL&amp;L, 202CL&amp;L, 203L&amp;L, 204L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Math – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Math - 115A</td>
<td></td>
</tr>
<tr>
<td>Ethics and Logic – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Philosophy - 101, 102, 104, 202, 203, 204, 205, 207</td>
<td></td>
</tr>
<tr>
<td>Social Relationships – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Psychology - 201</td>
<td></td>
</tr>
<tr>
<td>Western Culture – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Art - 198, 199, 202</td>
<td></td>
</tr>
<tr>
<td>English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231</td>
<td></td>
</tr>
<tr>
<td>History - 101, 102</td>
<td></td>
</tr>
<tr>
<td>Humanities - 195</td>
<td></td>
</tr>
<tr>
<td>Theater - 201</td>
<td></td>
</tr>
<tr>
<td>American Culture – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>History - 201, 202, 207, 211, 212B, 214, 220</td>
<td></td>
</tr>
<tr>
<td>Political Science - 111, 205, 220</td>
<td></td>
</tr>
<tr>
<td>International Culture – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Anthropology - 103, 110</td>
<td></td>
</tr>
<tr>
<td>English - 207, 211, 218A</td>
<td></td>
</tr>
<tr>
<td>French - 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Geography - 104, 105</td>
<td></td>
</tr>
<tr>
<td>German - 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>History - 150, 151, 216</td>
<td></td>
</tr>
<tr>
<td>International Cultural Studies - 101GER (Germany)</td>
<td></td>
</tr>
<tr>
<td>Philosophy - 105</td>
<td></td>
</tr>
<tr>
<td>Political Science - 202, 210A, 210B, 211</td>
<td></td>
</tr>
<tr>
<td>Spanish - 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Aesthetic Values – 3 credits with grades of “C” or better</td>
<td></td>
</tr>
<tr>
<td>Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D</td>
<td></td>
</tr>
<tr>
<td>English - 216, 223</td>
<td></td>
</tr>
<tr>
<td>Music classes numbered 100 and above except Music 240</td>
<td></td>
</tr>
<tr>
<td>Voice - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Physical Education and Health – minimum 2 credits</td>
<td>Choose One of the following options:</td>
</tr>
<tr>
<td>PE 101A and choose one PEA or Dance course</td>
<td>MCC and the MTA require a “C” or better in courses used to meet ASA and MTA requirements, which are noted on this guide. Classes that may be used to fulfill MTA requirements are in bold.</td>
</tr>
</tbody>
</table>
**Program Specific Courses** - 12 credits with grades of “C” or better. MUST take all classes

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HE 102</td>
</tr>
<tr>
<td>HE 120</td>
</tr>
<tr>
<td>HE 130</td>
</tr>
<tr>
<td>SOC 101</td>
</tr>
</tbody>
</table>

**Computer Competency**

Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.

**Electives - Minimum 15 Credits**

Elective credits will be comprised of additional classes and required class credits earned in the general education requirements. Please work with the MCC Pathway Counselor & refer to the transfer guide from 4 year institution to select courses to transfer.
The MiTransfer Pathway Associate in Science and Arts (ASA) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, is required for the ASA Degree. MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below. Courses numbered below 100 do not count toward the ASA. Any course can be used only ONCE in any category.

### General Education Requirements

Minimum – 35 credits

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>6 credits with grades of “C” or better&lt;br&gt;English – 101, 102</td>
</tr>
<tr>
<td>Science</td>
<td>6 credits with grades of “C” or better&lt;br&gt;Courses must be in two or more disciplines (subjects).&lt;br&gt;Must include at least one lab science&lt;br&gt;Biology 152L &amp; L&lt;br&gt;Plus must include one of the following:&lt;br&gt;Lab classes:&lt;br&gt;Chemistry – any MCC Chemistry course with a lab&lt;br&gt;Environmental Science - 110L &amp; L&lt;br&gt;Geography - 101A, 215&lt;br&gt;Geology - 101A, 102, 250 Lab&lt;br&gt;Physical Science - 101A&lt;br&gt;Physics - 201 CL &amp; L, 202 CL &amp; L, 203 L &amp; L, 204 L &amp; L&lt;br&gt;Non-Lab:&lt;br&gt;Anthropology – 105 D&lt;br&gt;Astronomy - 101, 105 A&lt;br&gt;Geography - 214, 260&lt;br&gt;Geology - 100, 201, 250 LEC</td>
</tr>
<tr>
<td>Math</td>
<td>3 credits with grades of “C” or better&lt;br&gt;Math - 115 A</td>
</tr>
<tr>
<td>Ethics and Logic</td>
<td>3 credits with grades of “C” or better&lt;br&gt;Philosophy - 101, 102, 104, 202, 203, 204, 205, 207</td>
</tr>
<tr>
<td>Social Relationships</td>
<td>3 credits with grades of “C” or better&lt;br&gt;Psychology - 201</td>
</tr>
<tr>
<td>Western Culture</td>
<td>3 credits with grades of “C” or better&lt;br&gt;Art - 198, 199, 202&lt;br&gt;English - 200 A, 201 A, 205, 206, 210, 213, 225, 226, 227, 228, 231&lt;br&gt;History - 101, 102&lt;br&gt;Humanities - 195&lt;br&gt;Theater - 201</td>
</tr>
<tr>
<td>American Culture</td>
<td>3 credits with grades of “C” or better&lt;br&gt;History - 201, 202, 207, 211, 212 B, 214, 220&lt;br&gt;Political Science - 111, 205, 220</td>
</tr>
<tr>
<td>International Culture</td>
<td>3 credits with grades of “C” or better&lt;br&gt;Anthropology - 103, 110&lt;br&gt;English - 207, 211, 218 A&lt;br&gt;French - 101, 102, 201, 202&lt;br&gt;Geography - 104, 105&lt;br&gt;German - 101, 102, 201, 202&lt;br&gt;History - 150, 151, 216&lt;br&gt;International Cultural Studies - 101 GER (Germany)&lt;br&gt;Philosophy - 105&lt;br&gt;Political Science - 202, 210 A, 210 B, 211&lt;br&gt;Spanish - 101, 102, 201, 202</td>
</tr>
</tbody>
</table>
| Physical Education and Health | minimum 2 credits<br>Choose One of the following options:<br>Option 1: PEA 101 A, 103, 104 A, 118, 201 and choose ONE PEA or Dance course<br>Option 2: PEA 121 (3 credit hours)<br>MCC and the MTA require a “C” or better in courses used to meet ASA and MTA requirements, which are noted on this guide. Classes that may be used to fulfill MTA requirements are in bold.
<table>
<thead>
<tr>
<th><strong>Program Specific Courses</strong> - 6 credits with grades of “C” or better MUST take all classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 101</td>
</tr>
<tr>
<td>SOC 203</td>
</tr>
</tbody>
</table>

**Computer Competency**

Pass any 3-credit-hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.

**Electives - Minimum 21 Credits**

Elective credits will be comprised of additional classes and required class credits earned in the general education requirements. Please work with the MCC Pathway Counselor & refer to the transfer guide from 4 year institution to select courses to transfer.

Recommended Elective

SOC 202A
The MiTransfer Pathway Associate in Science (AS) degree includes the Michigan Transfer Agreement (MTA) and is designed for students who plan to transfer to a four-year college or university and major in a particular discipline.

The core courses will help you develop your understanding of abstract mathematics, introductory physics and engineering, and other related disciplines. Courses numbered below 100 do not count toward the AS degree.

### General Education Requirements

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>62 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong> – 6 credits with grades of “C” or better</td>
<td><strong>Social Science</strong> – 2 courses</td>
</tr>
<tr>
<td>English – 101</td>
<td>Courses must be in two or more disciplines</td>
</tr>
<tr>
<td><strong>One course from:</strong></td>
<td><strong>Anthropology</strong> - 103, 110</td>
</tr>
<tr>
<td>English 102</td>
<td><strong>Economics</strong> - 101A, 102A</td>
</tr>
<tr>
<td>Communications - 101, 107, 210</td>
<td><strong>Geography</strong> - 104, 105</td>
</tr>
<tr>
<td><strong>Science</strong> – 15 credits</td>
<td><strong>History</strong> - 201, 202, 207, 211, 212B, 214, 220</td>
</tr>
<tr>
<td>All classes required</td>
<td><strong>Political Science</strong> - 111, 202, 205, 210, 211, 220</td>
</tr>
<tr>
<td>CHEM 101 LEC</td>
<td><strong>Psychology</strong> - 102, 201, 203, 207, 209, 210</td>
</tr>
<tr>
<td>CHEM 101A</td>
<td><strong>Sociology</strong> - 101, 102A, 202A, 203, 205, 206</td>
</tr>
<tr>
<td>PHYS 203 L&amp;L</td>
<td><strong>Woman's Gender Studies</strong> - 101, 201</td>
</tr>
<tr>
<td>PHYS 204 L&amp;L</td>
<td><strong>Humanities and Fine Arts</strong> – 2 courses</td>
</tr>
<tr>
<td>Math – 19 credits</td>
<td>Courses must be in two or more disciplines (subjects)</td>
</tr>
<tr>
<td>All classes required</td>
<td><strong>Art</strong> - 100A, 198, 199, 202, 213A</td>
</tr>
<tr>
<td>MATH 161</td>
<td><strong>English</strong> - 200A, 201A, 204, 205, 206, 207, 210, 211, 213, 216, 218, 223, 225, 226, 227, 228, 231</td>
</tr>
<tr>
<td>MATH 162A</td>
<td><strong>Foreign Language</strong> – All Foreign Languages count as one subject</td>
</tr>
<tr>
<td>MATH 276</td>
<td><strong>French</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td>MATH 283</td>
<td><strong>German</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td>MATH 295</td>
<td><strong>Spanish</strong> - 101, 102, 201, 202</td>
</tr>
<tr>
<td>Engineering Requirements – 6 credits</td>
<td><strong>History</strong> - 101, 102, 150, 151, 216</td>
</tr>
<tr>
<td>All classes required</td>
<td><strong>Humanities</strong> - 195</td>
</tr>
<tr>
<td>ENGR 202 - 3</td>
<td><strong>International Cultural Studies</strong> - 101GERA (Germany)</td>
</tr>
<tr>
<td>ENGR 204 - 3</td>
<td><strong>Music</strong> - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202</td>
</tr>
</tbody>
</table>

**SPECIAL NOTE FOR GENERAL EDUCATION:**

Thirty credits are required for the MTA. If the courses selected do not total 30 credit hours or more, some of the courses below will be counted toward the MTA. A grade of “C” or better is required in each course used to fulfill the MTA.

<table>
<thead>
<tr>
<th>Electives</th>
<th>Minimum 4 Credits</th>
</tr>
</thead>
</table>

Elective credits will be comprised of additional classes and required class credits earned in the general education requirements.

Please work with the MCC Pathway Counselor and refer to the transfer guide from the 4-year institution to make sure that you select the appropriate courses to transfer.

**Recommended Elective**

ENGR 105
Associate in Science (AS)
Pre-Engineering
with Michigan Transfer Agreement

This program is designed to prepare you for transfer to a four-year degree in math, physical science (astronomy, chemistry, geology, physics, etc) and all types of engineering (civil, mechanical, chemical, electrical, and others). This program also includes general education courses necessary to satisfy the Michigan Transfer Agreement (MTA) and requires a minimum of 62 credit hours. The core courses will help you develop your understanding of abstract mathematics, introductory physics, and other related disciplines.

### General Education Requirements

**Minimum – 35 credits**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minimum Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication – 6 credits with grades of &quot;C&quot; or better</td>
<td></td>
</tr>
<tr>
<td><strong>English</strong></td>
<td>101, and one course from ENG 102, COM 101, 107, 201</td>
</tr>
<tr>
<td><strong>Natural Science Requirement</strong> – Met by core courses</td>
<td></td>
</tr>
<tr>
<td><strong>Mathematics Requirement</strong> – Met by core courses</td>
<td></td>
</tr>
<tr>
<td><strong>Social Sciences</strong> – Two courses; must be in two or more disciplines (subjects)</td>
<td></td>
</tr>
<tr>
<td><strong>Anthropology</strong> – 103, 110</td>
<td></td>
</tr>
<tr>
<td><strong>Economics</strong> – 101A, 102A</td>
<td></td>
</tr>
<tr>
<td><strong>Geography</strong> – 104, 105</td>
<td></td>
</tr>
<tr>
<td><strong>History</strong> – 201, 202, 207, 211, 212B, 214, 220</td>
<td></td>
</tr>
<tr>
<td><strong>Political Science</strong> – 111, 202, 205, 210A, 211, 220</td>
<td></td>
</tr>
<tr>
<td><strong>Psychology</strong> – 102, 201, 203, 207, 209, 210</td>
<td></td>
</tr>
<tr>
<td><strong>Sociology</strong> – 101, 102A, 202A, 203, 205, 206</td>
<td></td>
</tr>
<tr>
<td><strong>Women's Gender Studies</strong> – 101, 201</td>
<td></td>
</tr>
<tr>
<td><strong>Humanities and Fine Arts</strong> – Two courses; must be in two or more disciplines (subjects)</td>
<td></td>
</tr>
<tr>
<td><strong>Art</strong> – 100A, 198, 199, 202</td>
<td></td>
</tr>
<tr>
<td><strong>Foreign Language</strong> – (all foreign languages count as one subject)</td>
<td></td>
</tr>
<tr>
<td>French – 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>German – 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Spanish – 101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td><strong>History</strong> – 101, 102, 150, 151, 216</td>
<td></td>
</tr>
<tr>
<td><strong>Humanities</strong> – 195</td>
<td></td>
</tr>
<tr>
<td><strong>International Cultural Studies</strong> – 101 GERA (Germany)</td>
<td></td>
</tr>
<tr>
<td><strong>Music</strong> – 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202</td>
<td></td>
</tr>
<tr>
<td><strong>Philosophy</strong> – 101, 102, 104, 105, 202, 203, 204, 205, 207</td>
<td></td>
</tr>
<tr>
<td><strong>Theater</strong> – 101, 102, 108, 121, 122, 160, 201, 202, 217</td>
<td></td>
</tr>
<tr>
<td><strong>Science and Engineering Electives</strong> – 14 credits</td>
<td>Electives must be chosen from the following list or have departmental approval.</td>
</tr>
<tr>
<td>Astronomy – 101, 105A</td>
<td></td>
</tr>
<tr>
<td>Biology – 130L&amp;L, 131L&amp;L</td>
<td></td>
</tr>
<tr>
<td>Chemistry – 101SUP, 102LEC &amp; 102A, 201E &amp; 201F, 202F &amp; 202G</td>
<td></td>
</tr>
<tr>
<td><strong>Computer-Aided Drafting and Design</strong> – 110, 135A, 150, 250</td>
<td></td>
</tr>
<tr>
<td><strong>Computer Information Systems</strong> – 120A, 162, 185</td>
<td></td>
</tr>
<tr>
<td><strong>Engineering</strong> – 105, 202, 204</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Science</strong> – 110L&amp;L</td>
<td></td>
</tr>
<tr>
<td><strong>Geology</strong> – 101A, 102, 201, 250LEC &amp; 250LAB</td>
<td></td>
</tr>
<tr>
<td><strong>Math</strong> – 215A, 141, 276</td>
<td></td>
</tr>
<tr>
<td><strong>SPECIAL NOTE FOR GENERAL EDUCATION:</strong> Thirty credits are required for the MTA. If the courses selected do not total 30 credit hours or more, some of the courses below will be counted toward the MTA. A grade or “C” or better is required in each course used to fulfill the MTA.</td>
<td></td>
</tr>
</tbody>
</table>

### STEM REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minimum Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Math Requirements</strong> – Choose Three (3) Courses from:</td>
<td></td>
</tr>
<tr>
<td><strong>Math</strong> – 161, 162A, 283, 295</td>
<td></td>
</tr>
<tr>
<td><strong>Physics Requirements</strong> – 10 credits</td>
<td></td>
</tr>
<tr>
<td><strong>Chemistry Requirements</strong> – 5 credits</td>
<td></td>
</tr>
<tr>
<td><strong>Astronomy</strong> – 101, 105A</td>
<td></td>
</tr>
<tr>
<td><strong>Biology</strong> – 130L&amp;L, 131L&amp;L</td>
<td></td>
</tr>
<tr>
<td><strong>Chemistry</strong> – 101SUP, 102LEC &amp; 102A, 201E &amp; 201F, 202F &amp; 202G</td>
<td></td>
</tr>
<tr>
<td><strong>Computer Information Systems</strong> – 120A, 162, 185</td>
<td></td>
</tr>
<tr>
<td><strong>Engineering</strong> – 105, 202, 204</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Science</strong> – 110L&amp;L</td>
<td></td>
</tr>
<tr>
<td><strong>Geology</strong> – 101A, 102, 201, 250LEC &amp; 250LAB</td>
<td></td>
</tr>
<tr>
<td><strong>Math</strong> – 215A, 141, 276</td>
<td></td>
</tr>
<tr>
<td><strong>SPECIAL NOTE FOR GENERAL EDUCATION:</strong> Thirty credits are required for the MTA. If the courses selected do not total 30 credit hours or more, some of the courses below will be counted toward the MTA. A grade or “C” or better is required in each course used to fulfill the MTA.</td>
<td></td>
</tr>
</tbody>
</table>

### General Electives - 3 Credits

Please work with the MCC Pathway Counselor and refer to the transfer guide from the 4-year institution to make sure that you select the appropriate courses to transfer.
Associate in Applied Science
Broadcasting and Multimedia/Technical

The Broadcasting and Multimedia/Technical curriculum is designed to prepare students for entry into the production side of television, radio, and related careers in news media. Core requirement classes strive to provide real world experience within the college's radio and television stations. As broadcasting transitions to digital delivery and expands to web and other new media methods of reaching listeners and viewers, this program requires students to broaden their experiences to include networking, web design and graphic design. This program is not designed to transfer to a four-year institution. Any student wishing to transfer to a four-year college is urged to consult with a counselor.

GENERAL EDUCATION REQUIREMENTS 20-22 CR. HRS.

ENG 101..............................................................................3
ENGLISH COMPOSITION

BCOM 102............................................................................3
ADVANCED BUS & TECH COMMUNICATIONS

Choose One (1) Course From: ...........................................3-4
BUS 126 BUSINESS MATH
MATH 109A COLLEGE ALGEBRA

Choose One (1) Course From: ...........................................3
BUS 127 HUMAN RELATIONS
BUS 166 QUALITY CUSTOMER SERVICE

Choose One (1) Course From: ...........................................3
CIS 110 COMPUTER CONCEPTS
CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From: ...........................................3-4
GEOG 104 CULTURAL GEOGRAPHY
PHIL 205 BUSINESS ETHICS
PSCI 111 INTRO TO AMERICAN GOVERNMENT
PSCI 211 COMPARATIVE GOVERNMENTS
PSYC 102 APPLIED PSYCHOLOGY
PSYC 201 GENERAL PSYCHOLOGY

PEA/DNC..............................................................................2
ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT OF CHOICE

RECOMMENDED ELECTIVES 6-8 CR. HRS.

COM 212 ..............................................................3
TELEVISION PRODUCTION

COM 290CI* .........................................................4
COOPERATIVE INTERNSHIP

ART 105B........................................................................3
TWO-DIMENSIONAL FORM AND SURFACE

GRD 120........................................................................3
INTRODUCTION TO GRAPHIC DESIGN

TH 121........................................................................3
INTRODUCTION TO TECHNICAL THEATER

TOTAL 62

*COM 290CI requires successful completion of at least 21 credit hours in the Broadcasting and Multimedia/Technical Core Requirements, 30 credit hours overall, 2.5 GPA and recommendation from department faculty.
Allied Health Programs
(Degrees, Certificates, & Diplomas)

Admission to the College does not guarantee admission to all programs within the College. Admission to the Community Health Worker class is with instructor permission. Students wishing to enter the Nurse Aide Training Class and/or programs of Nursing, Respiratory Therapy, and Medical Assisting, must submit additional applications. These applications may be obtained in the Counseling and Advising Center, Room 1050 or on the MCC website (www.muskegoncc.edu).

<table>
<thead>
<tr>
<th>Nursing</th>
<th>Respiratory Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• AAS Nursing Degree</td>
<td>• AAS Respiratory Therapy</td>
</tr>
<tr>
<td>• Practical Nurse Diploma</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Assisting</th>
<th>Surgical Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Medical Assistant Certificate</td>
<td>• AAS Surgical Technology</td>
</tr>
</tbody>
</table>
Medical Assistant Certificate

The Medical Assistant Certificate Program prepares graduates to perform administrative and clinical duties under the direction of the physician. Administrative duties may include scheduling appointments, maintaining medical records, and billing and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physicians.

The goal of the Medical Assistant Program is to prepare medical assistants who are competent in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains to enter the profession. All Medical Assistant (MA) courses must be passed with a minimum grade of C+ (77%) or better. In addition, students must successfully pass 100% of the psychomotor and affective competences in order to pass the course and/or progress in the program. A student who passes 100% of the psychomotor and affective competencies in a Medical Assistant course will receive the letter grade received in the theory component of the course as a course grade. Students should review the MCC Student Handbook, MCC Medical Assistant website, and Medical Assistant Program Handbook for admission requirements, course progression, grade requirements, and additional information. Students must complete a 160-hour unpaid, supervised practicum (MA110) in order to receive credit for the course.

The Muskegon Community College Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
9355 113th St. N. #7709
Seminole, FL 33775
727-210-2350
www.caahep.org

Graduates of the Muskegon Community College Medical Assistant Certificate Program are eligible to take the Certified Medical Assistants (CMA) examination through the American Association of Medical Assistants (AAMA). To contact AAMA, go to www.aama-ntl.org, call 312-899-1500, or send mail to 20 N. Wacker Drive, Suite 1575, Chicago, IL 60606.

Graduates of the Muskegon Community College Medical Assistant Certificate Program are also eligible to take the Registered Medical Assistant (RMA) examination through American Medical Technologists (AMT). To contact American Medical Technologists go to www.americanmedtech.org, call 847-823-5169, or send mail to 10700 W. Higgins Rd., Suite 150, Rosemont, IL 60018.

Note: The Medical Assistant Certificate flows directly into the Associate in Science and Arts degree.
Note: All MA courses must be completed with a C+ or better.
Non MA courses must be completed with a C or better.

Admission Prerequisites

Testing/entrance competencies: see MCC’s Medical Assistant website for more information:
www.muskegoncc.edu/degrees-and-certificates/certificate-programs/medical-assistant-certificate/
### CERTIFICATE REQUIREMENTS

**32-36 CR. HRS.**

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 101</td>
<td>MEDICAL TERMINOLOGY</td>
<td>3/3</td>
</tr>
<tr>
<td>AH 104</td>
<td>MEDICAL INSURANCE BILLING</td>
<td>2/2</td>
</tr>
<tr>
<td>MA 101</td>
<td>MEDICAL ASSISTANT ADMINISTRATIVE I</td>
<td>3/3</td>
</tr>
<tr>
<td>MA 102A L&amp;L</td>
<td>MEDICAL ASSISTANT CLINICAL I</td>
<td>5/7</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 115</td>
<td>INTRODUCTION TO ANATOMY AND PHYSIOLOGY</td>
<td>4/4</td>
</tr>
<tr>
<td>MA 105</td>
<td>MEDICAL ASSISTANT ADMINISTRATIVE II</td>
<td>2/2</td>
</tr>
<tr>
<td>MA 106A L&amp;L</td>
<td>MEDICAL ASSISTANT CLINICAL II</td>
<td>6/8</td>
</tr>
</tbody>
</table>

#### THIRD SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 196</td>
<td>ELECTRONIC HEALTH RECORDS</td>
<td>3/3</td>
</tr>
<tr>
<td>MA 110</td>
<td>MEDICAL ASSISTANT SEMINAR PRACTICUM (160 HOURS)</td>
<td>4/4</td>
</tr>
</tbody>
</table>

**Total: 32/36**

**Pre-Practicum Requirements:** ability to meet the requirements of the occupation of Medical Assistant, clear drug screen, required immunizations and negative 2-step tuberculin test, clear criminal background check, current CPR card (Basic Life Support, ARC Professional Rescuer)
Nursing

Accreditation
Muskegon Community College is accredited by:

**Higher Learning Commission,**
230 S. LaSalle St.,
Chicago, IL, 60604-1413,
(800) 621-7440
www.HLCommission.org

The Muskegon Community College Nursing Program is accredited by:

**Accreditation Commission for Education in Nursing,**
3390 Peachtree Road NE, Suite 1400,
Atlanta, GA, 30326,
phone: (404) 975-5000,
fax: (404) 975-5020.
www.acenursing.org

Mission Statement

*Approved 31 April 2017*

The Muskegon Community College Nursing Program is a ladder Associate Degree Nursing Program providing a foundation for lifelong Nursing Education.

To fulfill its mission, the Muskegon Community College Nursing Program is committed to

- partnerships with local community healthcare agencies and university partners to meet the intellectual, technical, and professional needs of a 21st century nursing workforce,
- supporting student success,
- encouraging diversity,
- stimulating intellectual curiosity, critical thinking, and evidence based practice, and
- professional ethics and accountability necessary for persons to function as professional nurses.
Nursing Career Ladder Curriculum

The Muskegon Community College Nursing Program offers a career ladder nursing curriculum consisting of the practical nurse diploma and the Associate Degree in Applied Science Nursing (AAS) with the opportunity to enroll concurrently in the Michigan State University Bachelor of Science in Nursing (BSN), or the Grand Valley State University Bachelor of Science in Nursing (BSN).

Students who successfully complete the practical nurse diploma will be eligible to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN) to practice as a Licensed Practical Nurse (LPN). The practical nurse diploma flows directly into the Associate of Applied Science Nursing Degree.

Students who successfully complete the Associate in Applied Science Nursing (AAS) degree will be eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN) to practice as a Registered Nurse (RN).

Muskegon Community College Associate Degree Nursing students who have enrolled in clinical nursing courses in the nursing major are eligible to apply for concurrent enrollment in the Bachelor of Science in Nursing at either Michigan State University or Grand Valley State University. Students interested in this option should contact the appropriate university for more details. Acceptance into these programs are determined by the applicant’s previous academic record. Admission to the program is competitive; the most qualified candidates are selected from the pool of candidates meeting the minimum criteria.

Licensed Practical Nurses and other individuals with prior nursing education have the opportunity to enter into the curriculum with advanced placement. Students seeking an Associate in Applied Science Nursing (AAS) who have previously obtained the LPN or LVN licensure must possess an unencumbered license and current work experience.

The Muskegon Community College Nursing Program is approved by the Michigan Board of Nursing to provide a program of nursing education leading to the diploma in Practical Nursing and an Associate Degree in Nursing. See www.muskegoncc.edu/nursing for more information.

The Muskegon Community College Associate Degree Nursing Program (RN) and the Practical Nurse (PN) option are fully accredited by the Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Rd NE, Suite 1400, Atlanta, GA 30326 (404) 965-5220, www.acenursing.org.

This program meets the State of Michigan rules for nursing education programs and prepares graduates to take the National Council Licensure Examination (NCLEX) for practical nurse and/or registered nurse licensure. Graduates who intend on practicing in another state should review that state’s requirements for licensure at: www.ncsbn.org/14730.htm

The Michigan State University Bachelor of Science in Nursing (BSN) program and the Grand Valley State University BSN program are approved by the Michigan Board of Nursing and accredited by the Commission on Collegiate Nursing Education (CCNE).

For more information: reg.msu.edu/academicPrograms/ProgramDetail.aspx?Program=4008

<table>
<thead>
<tr>
<th>RN NCLEX PASS RATE</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN JOB PLACEMENT RATE</td>
<td>N/A</td>
<td>100%</td>
<td>95.5%</td>
<td>97%</td>
</tr>
</tbody>
</table>

90 - 2023 - 2024 Muskegon Community College Catalog
# Muskegon Community College Nursing Program Career Ladder – Effective Fall 2021

(Revised and Approved 12/10/20)

## MUSKEGON COMMUNITY COLLEGE

### Nursing Program Career Ladder

#### Effective Fall 2021

(Revised and Approved 12/10/20)

### LEVEL II

<table>
<thead>
<tr>
<th>Term  5</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 222A</td>
</tr>
<tr>
<td>NUR 211A</td>
</tr>
<tr>
<td>NUR 212B</td>
</tr>
<tr>
<td>BIOL 207 LEC</td>
</tr>
<tr>
<td>Coreq: BIOL 207A</td>
</tr>
<tr>
<td>Prereq: BIOL 152 L &amp; L</td>
</tr>
</tbody>
</table>

**Total 45 Credits**

### LEVEL I

<table>
<thead>
<tr>
<th>Term  4</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 141B</td>
</tr>
<tr>
<td><strong>CHEM 109 LEC/109A</strong></td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td><strong>CHEM 100 LEC/100A</strong></td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>Complete 1 year of chemistry with a C (2.0) or better from an approved high school within the past 8 years.</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>Pass the Toledo Chemistry Competency Examination in the MCC Testing Center with a “C” (70%) or higher.</td>
</tr>
</tbody>
</table>

**Total 40 Credits**

### PRACTICAL NURSE DIPLOMA

<table>
<thead>
<tr>
<th>Term  3</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 131B</td>
</tr>
<tr>
<td>*BIOL 252 L &amp; L</td>
</tr>
<tr>
<td>(formerly BIOL 106 L &amp; L)</td>
</tr>
<tr>
<td>Prereq: BIOL 152 L &amp; L</td>
</tr>
</tbody>
</table>

**Total 24 Credits**

### LEVEL I

<table>
<thead>
<tr>
<th>Term  2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 126</td>
</tr>
<tr>
<td>NUR 121A</td>
</tr>
<tr>
<td>AH 111</td>
</tr>
<tr>
<td>Environmental Stressors and Nutrition</td>
</tr>
<tr>
<td>BIOL 152 L &amp; L</td>
</tr>
<tr>
<td>(formerly BIOL 105 L &amp; L)</td>
</tr>
<tr>
<td>ANTH 103</td>
</tr>
<tr>
<td>PSYC 201</td>
</tr>
<tr>
<td>ENG 101</td>
</tr>
</tbody>
</table>

* Indicates course is optional for individuals exiting upon completion of Level I; must be completed prior to Term 5 if pursuing AAS Degree. Chemistry competency must be met prior to Term 5.

Students must make an appointment with the MCC Counseling and Advising Center (231.777.0362) to review requirements, to develop a course plan, and to receive a Nursing Program application. See Requirement Checklist for Ready List Requirements.

If testing/coursework is over eight years old, competency must be validated on established examinations or by repeating the course.

Courses in the Nursing Curriculum (NUR or AH) must be completed in sequence with a “C+” (2.3) or above in order to progress in the Nursing Program. Non-nursing courses may be completed with a C (2.0) or above prior to entry into the Nursing Program sequence.

General education courses must be completed with a “C” (2.0) or above in adherence to the Muskegon Community College Course Repeat Rule, which was developed to provide fair access to classes. It allows the student to repeat the course once. Instructor permission is required to take a course more than twice. To repeat a course, a student must register for and pay all necessary fees. Each grade received will appear on a student’s record, but only the last grade awarded is used in computing a GPA. Keep in mind that if you retake a class and receive a lower grade, the last grade is still the one that counts. When transferring to another college or university, you may be held accountable for all attempts as grades associated with a course taken at Muskegon Community College.
MUSKEGON COMMUNITY COLLEGE – MICHIGAN STATE UNIVERSITY
CONCURRENT BSN NURSING PROGRAM LADDER

<table>
<thead>
<tr>
<th>Term</th>
<th>MICHIGAN STATE UNIVERSITY BACHELOR OF SCIENCE NURSING – 120+ TOTAL CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>NUR 485 Integrative Seminar III 2 Cr.</td>
</tr>
<tr>
<td></td>
<td>NUR 470 Community &amp; Population Health 4 Cr.</td>
</tr>
<tr>
<td>9</td>
<td>NUR 465 Leadership Immersion 4 Cr.</td>
</tr>
<tr>
<td></td>
<td>NUR 455 Integrative Seminar II 2 Cr.</td>
</tr>
<tr>
<td>8</td>
<td>NUR 355 Integrative Seminar I 2 Cr.</td>
</tr>
<tr>
<td></td>
<td>NUR 336 Health Promotion for the BSN 4 Cr.</td>
</tr>
<tr>
<td>7</td>
<td>NUR 340 Foundations of Nursing Practice 4 Cr.</td>
</tr>
<tr>
<td></td>
<td>NUR 325 Transitions to BSN Practice 2 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th>MICHIGAN STATE UNIVERSITY BACHELOR OF SCIENCE NURSING – 120+ TOTAL CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>NUR 485 Integrative Seminar III 2 Cr.</td>
</tr>
<tr>
<td>5</td>
<td>NUR 470 Community &amp; Population Health 4 Cr.</td>
</tr>
<tr>
<td>4</td>
<td>NUR 465 Leadership Immersion 4 Cr.</td>
</tr>
<tr>
<td></td>
<td>NUR 455 Integrative Seminar II 2 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th>MCC ASSOCIATE IN APPLIED SCIENCE NURSING DEGREE (AAS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ISS 300 Social Science 4 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th>MCC PRACTICAL NURSE DIPLOMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>NUR 300 Pathophysiology 4 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th>APPLY AND BE ACCEPTED TO MSU BSN PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MCC Courses: select one:</td>
</tr>
<tr>
<td></td>
<td>HIST 101 Western Civilization to 1500 4 Cr.</td>
</tr>
<tr>
<td></td>
<td>HIST 102 Western Civilization 1500 to Present 4 Cr.</td>
</tr>
<tr>
<td></td>
<td>MU 103A Music Appreciation 3 Cr.</td>
</tr>
<tr>
<td></td>
<td>PHIL 101 Basic Concepts of Philosophy 3 Cr.</td>
</tr>
<tr>
<td></td>
<td>PHIL 204 Biomedical Ethics (recommended) 3 Cr.</td>
</tr>
<tr>
<td></td>
<td>PHIL 205 Business Ethics 3 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th>MSU PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MCC Courses:</td>
</tr>
<tr>
<td></td>
<td>ENG 102 English Composition 3 Cr.</td>
</tr>
<tr>
<td></td>
<td>MATH 109 College Algebra w/ Applications 4 Cr.</td>
</tr>
<tr>
<td></td>
<td>Select one:</td>
</tr>
<tr>
<td></td>
<td>PSYC 207 Life Span Development 4 Cr.</td>
</tr>
<tr>
<td></td>
<td>ED 250 Human Growth and Learning 3 Cr.</td>
</tr>
<tr>
<td></td>
<td>Select one:</td>
</tr>
<tr>
<td></td>
<td>HIST 201 United States to 1877 3 Cr.</td>
</tr>
<tr>
<td></td>
<td>HIST 202 US from Reconstruction to Present 3 Cr.</td>
</tr>
</tbody>
</table>

The Michigan State University Bachelor of Science in Nursing (B.S.N.) program is approved by the Michigan Board of Nursing and accredited by the Commission on Collegiate Nursing Education (C.C.N.E.). Muskegon Community College Associate Degree in Nursing students who have enrolled in clinical nursing courses in the nursing major are eligible to apply for transfer admission to Michigan State University into the concurrent enrollment B.S.N. program. Acceptance is determined by the applicant's previous academic record. Admission to the program is competitive; the most qualified candidates are selected from the pool of candidates meeting the minimum criteria.

See [http://reg.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=4008](http://reg.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=4008) for more information.

R 4/2017
MUSKEGON COMMUNITY COLLEGE –
GRAND VALLEY STATE UNIVERSITY
CONCURRENT BSN NURSING PROGRAM LADDER

<table>
<thead>
<tr>
<th>Term 5</th>
<th>Term 6</th>
<th>Term 7</th>
<th>Term 8</th>
<th>Term 9</th>
<th>Term 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Cohort</td>
<td>Fall Cohort</td>
<td>Fall Cohort</td>
<td>Fall Cohort</td>
<td>Fall Cohort</td>
<td>Fall Cohort</td>
</tr>
<tr>
<td>NUR 311 Dimensions of Nursing Practice</td>
<td>NUR 312 Professional Nursing Issues</td>
<td>NUR 311 Dimensions of Nursing Practice</td>
<td>NUR 312 Professional Nursing Issues</td>
<td>NUR 312 Professional Nursing Issues</td>
<td>* History Perspective</td>
</tr>
<tr>
<td>2 Cr.</td>
<td>2 Cr.</td>
<td>2 Cr.</td>
<td>2 Cr.</td>
<td>* History Perspective</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

**GRAND VALLEY STATE UNIVERSITY BACHELOR OF SCIENCE NURSING – 122/123 TOTAL CREDITS**

<table>
<thead>
<tr>
<th>Term 10</th>
<th>Term 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Cohort</td>
<td>Spring Cohort</td>
</tr>
<tr>
<td>* Issues / Electives</td>
<td>Nursing Leadership</td>
</tr>
<tr>
<td>NUR 456</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 9</th>
<th>Term 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Cohort</td>
<td>Spring Cohort</td>
</tr>
<tr>
<td>* Issues</td>
<td>Nursing Care for Populations</td>
</tr>
<tr>
<td>NUR 420</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 8</th>
<th>Term 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Cohort</td>
<td>Spring Cohort</td>
</tr>
<tr>
<td>NUR 407</td>
<td>SWS Community Based Nursing Care</td>
</tr>
<tr>
<td>2 Cr.</td>
<td>4 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 7</th>
<th>Term 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Cohort</td>
<td>Spring Cohort</td>
</tr>
<tr>
<td>Basic Pathophysiology</td>
<td>* Electives</td>
</tr>
<tr>
<td>BMS 310</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 6</th>
<th>Term 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Cohort</td>
<td>Spring Cohort</td>
</tr>
<tr>
<td>NUR 312 Professional Nursing Issues</td>
<td>Dimensions of Nursing Practice</td>
</tr>
<tr>
<td>2 Cr.</td>
<td>2 Cr.</td>
</tr>
</tbody>
</table>

**MCC ASSOCIATE IN APPLIED SCIENCE NURSING DEGREE (AAS)**

<table>
<thead>
<tr>
<th>Term 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses taken at MCC</td>
</tr>
<tr>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

**APPLY AND BE ACCEPTED TO GVSU BSN PROGRAM**

<table>
<thead>
<tr>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses taken at MCC</td>
<td>History Perspective</td>
</tr>
<tr>
<td>MATH 115A Probability &amp; Statistics</td>
<td>* History Perspective</td>
</tr>
<tr>
<td>3 Cr.</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses taken at MCC</td>
</tr>
<tr>
<td>MATH 100A Intermediate Algebra</td>
</tr>
<tr>
<td>4 Cr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses taken at MCC</td>
<td>History Perspective</td>
</tr>
<tr>
<td>PSYC 207 Life Span Development</td>
<td>* History Perspective</td>
</tr>
<tr>
<td>4 Cr.</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

**GVSU PREREQUISITES**

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses taken at MCC</td>
<td>PSYC 207 Life Span Development</td>
</tr>
<tr>
<td>MATH 100A Intermediate Algebra</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>or PSYC 207 Life Span Development</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>ED 250 Human Growth and Learning</td>
<td>* History Perspective</td>
</tr>
<tr>
<td>3 Cr.</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

* Can be satisfied with several course options – see Counselor.

The Kirkhof College of Nursing (KCON) is accredited by the Commission on Collegiate Nursing Education (CCNE), and the undergraduate curriculum is based on the American Association of Colleges of Nursing’s (AACN) Baccalaureate Essentials. Students apply as a degree-seeking student with declaration of nursing as their major to the baccalaureate program using the GVSU Office of Admissions application form and apply to the RN-BSN program by completing the KCON secondary application form. It is recommended that students apply during the first semester they are enrolled in the MCC AAS-Nursing Program if they wish to pursue concurrent enrollment between MCC and GVSU. Admission to the program is competitive; the most qualified candidates will be selected from the pool of candidates meeting the minimum criteria. Students must meet established admission requirements. Information regarding admission requirements is featured in the GVSU Course Catalog at: [http://catalog.gvsu.edu/preview_program.php?catoid=44&poid=7034](http://catalog.gvsu.edu/preview_program.php?catoid=44&poid=7034) or the KCON website at: [http://www.gvsu.edu/kcon/rn-to-bsn-admission-process-331.htm](http://www.gvsu.edu/kcon/rn-to-bsn-admission-process-331.htm)

R 6.2017
Nursing Admission

General Information
To better enable individuals to validate the course competencies required for admission into the Muskegon Community College Nursing Program, and to enhance their chance for success, the following high school educational preparation is recommended:

- 1 year of Biology
- 1 year of Chemistry
- 1 year of General Math
- Intermediate and Advanced Algebra
- 3-4 years of English
- 1 year of Computer

Counseling services are available to assist students in career and educational planning. Prospective students are strongly advised to make an appointment in the Counseling and Advising Center, Room 1050, (231) 777-0362.

Individuals interested in pursuing admission are advised to make early application as spaces are limited. When applicants complete the entry level requirements they are placed on a waitlist and admitted on a first come, first served basis.

Up to one hundred (100) spaces will be available for generic admission applicants each year. Students who are notified of admission may defer admission twice without losing their placement on the waitlist. However, the student must enter on the third notification or be removed from the waitlist and complete a new Nursing Program application.

Spaces vacated by generic students exiting from the Program upon completion of Level I will be available for NUR 212B advanced placement applicants each Fall and Winter.

Spaces vacated through attrition will be available for applicants eligible for advanced placement into any nursing course. Students must demonstrate continued competency in previously learned nursing courses for readmission. A student who exits the Program during the first level must meet readmission requirements within two years.

If the number of ready applicants exceeds the number of spaces available, the applicants with the earliest ready dates will be admitted. Any applicants remaining, after the spaces available are filled, will be placed on the waitlist for the next available admission date. Applicants on the waitlist are encouraged to take the required general education courses.

Up to half of all Nursing Admissions to each class will be selected from the applicants who have completed all general education courses for the AAS Nursing Degree.

Requirement Checklist
Program admission is based on a first come, first served basis; once the Ready List requirements have been met and a nursing application completed, the applicant will be placed on the appropriate waitlist.

Ready List Requirements
- Active Muskegon Community College student status.
- If you have attended other colleges, request official transcripts be sent from their Records Office to Muskegon Community College, Attn: Transfer Evaluation. Transfer credit will be given only for equivalent courses in which a “C” (2.0) or above was achieved.
- Provide proof of high school completion or GED to the Admissions Office, Room 1043.
- MCC cumulative GPA must be at least a C (2.0).

If testing/course work is over eight years old, competency must be validated on established examinations or by repeating the course. Courses in the Nursing Curriculum must be completed in sequence.

Students with questions regarding the requirement checklist are directed to the Counseling & Advising Center (231) 777-0362. Schedule an appointment with a counselor to complete the Nursing Program application.
Ready List Communication
It is the responsibility of each student to notify the Student Welcome Center of an address, name, and/or phone number change(s). (Please see www.muskegoncc.edu/residency for procedures to update your information.) The College will not be responsible for any incident arising from the student’s failure to update this information.

The MCC Nursing Program’s primary method of communication is the MCC email system. Potential nursing students will be notified of admission opportunities through their MCC email account.

Once the nursing applicant has completed all general education requirements the student may complete an Accelerated Application by making an appointment with a counselor in the Counseling and Advising Center (231) 777-0362. The Accelerated Application is not available during walk-in counseling.

Reading Skills Competency
Complete one of the following:
- Score 25 or above on SAT Reading (19 or above on ACT Reading) score.
- Score 255 or above on Accuplacer Next Gen Reading.

Writing Skills Competency
Complete one of the following:
- Score 26 or above on SAT Writing (19 or above on ACT English) test.
- Score 245 or above on Accuplacer Next Gen Writing.
- Complete ENG 091, Intro to English Composition (last offered Winter 2022), with a minimum of a “C” (2.0).
- Complete ENG 101, English Composition with a minimum of a “C” (2.0).

Math Skills Competency
Complete one of the following:
- Complete MATH 036A, Basic Math (last offered Winter 2022), and Math 038, Pre-Algebra, (last offered Winter 2022), with “C” (2.0).
- Score 251-270 on Accuplacer Next Gen Arithmetic AND pass Math 038, Pre-Algebra (last offered Winter 2022), with a minimum of a “C” (2.0) AND pass the Math 035F, Metric Module (or test out).
- Score 271 or above on Accuplacer Next Gen Arithmetic AND pass the MATH 035F, Metric Module (or test out).
- Complete MATH 099, Math for Health Sciences, with a minimum of a “C” (2.0).

Computer Literacy Skills Competency
(Computer courses must have been completed within the past five (5) years to transfer to MCC.) Complete one of the following:
- Pass the Computer Literacy Test with a minimum grade of 80%.
- Complete CIS 100, Introduction to Personal Computers; or CIS 110, Computer Concepts; or CIS120A, Introduction to Computer Information Systems with a minimum of a “C” (2.0).

College Success Skills Competency
Complete one of the following:
- Complete CSS 100A, College Success Seminar, (3 credits) with a minimum of a “C” (2.0).
- At least 30 college credits of 100-level courses or higher have been completed with a cumulative “C” (2.0) or higher.
- Completed by an exemption per MCC rule regarding remedial credits.

Required For Application Into LPN to RN Option
- Submit evidence of current, unencumbered Michigan LPN license.
- A letter from current employer that indicates a minimum of 6 months current work experience in the LPN role.
- Transfer LPN to RN students will need to fill out the Credit for Industry-Recognized Credentials form prior to applying.
Occupational Requirements
Students in the Muskegon Community College Nursing Program are required to complete a physical examination prior to beginning the first clinical nursing course. Students must be able to meet essential functions of the occupation of nursing. Students are required to maintain health requirements throughout the Program. See www.muskegoncc.edu/nursing for health requirements, essential functions of the occupation, and occupational risks.

Criminal Background Check
Federal and State laws require a criminal background check of those assigned to a clinical agency; Michigan licensure will require an FBI fingerprint check. Felonies and some misdemeanors convictions may prevent you from completing the Nursing Program requirements and taking licensure examinations, thus affecting your employment options. Students must have a clear criminal background check to begin the Nursing Program. Any student who has not resided in Michigan for at least three or more years preceding their participation in the Nursing Program is required to obtain a criminal background check based on a national database; the student is responsible for any additional charge. Any student who becomes subject to criminal prosecution while participating in the Nursing Program is required to report such allegations immediately to the Nursing Program Director.

Please see the “State Information on Criminal Background Checks” on the MCC Nursing Department website: www.muskegoncc.edu/nursing.

Nursing Program Application
- Schedule an appointment with a MCC counselor, Room 1050 or call (231) 777-0362 to verify the above information and complete the application process.

Orientation for the Nursing Program
Orientation information will be emailed to students once they are admitted into the Nursing Program. New (NUR 100) and advanced placement students will be required to complete an online orientation and quiz in order to (re)familiarize themselves with Program policies.

Once they have been placed on the appropriate waitlist, transfer students will meet with the Program Coordinator or Nursing Faculty in order to familiarize them with the MCC Nursing Program and answer any questions.

Acceptance of Course Credit
Credits for courses completed at Muskegon Community College or other post-secondary educational institutions will be accepted toward fulfillment of the nursing (PN and AAS) curriculum requirements provided that all of the following criteria are met:
- The courses are deemed equivalent to the courses required in the MCC nursing curriculum.
- Nursing courses must be completed with a minimum of a “C+” (2.3).
- The general education courses must be completed with a minimum grade of a “C” (2.0).
- The courses were completed within eight years prior to ready date.

Official transcripts from institutions other than Muskegon Community College should be sent to the Records Auditor for credit evaluation at Officeoftheregistrar@muskegoncc.edu.
Graduation

To be eligible for graduation from the Nursing Program, students must meet all of the following requirements:

1. Complete the nursing curriculum requirements for the diploma/degree desired with a minimum grade of “C+” (2.3) in each nursing course and a “C” (2.0) or better in each general education course.

2. Complete not less than 30 credit hours or the last 15 credit hours required in the nursing curriculum at Muskegon Community College.

3. File an application for graduation in the Office of the Registrar, Room 1048 or at the Student Welcome Center no later than 90 days prior to the end of the term of anticipated graduation.

Nursing Advisory Committee

The Nursing Program meets bi-annually with its Advisory Committee; a group of representatives from the Clinical Affiliate Agencies, Nursing-at-Large, Consumer Representatives, and Student Representatives. The Director of the Nursing Program and the Vice President for Academic Affairs are ex-officio members of the Advisory Committee.
Muskegon Community College currently offers students the therapist level of instruction. The goal of the Respiratory Therapy (RT) Program is to prepare students who graduate with the ability to demonstrate competence in the areas of cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory therapy that is expected and performed by registered respiratory therapists (RRT’s). The student will have exposure to adult, neonatal and pediatric critical care as part of the program. This program is accredited by the Commission on Accreditation for Respiratory Care (CoARC) and prepares graduates to take the national credentialing examinations. These exams lead to certification and registry, and provides a pathway for state licensure.

Commission on Accreditation for Respiratory Care
264 Precision Blvd.
Telford, TN 37690
817-283-2835 ext. 107
www.coarc.com

After completing an application to Muskegon Community College and being accepted, the Respiratory Therapy (RT) Program has a separate admissions process and an application to the RT Program is required. Potential RT students can visit the Respiratory Therapy Department in Room 2090, or call (231) 777-0223, or email at: rt@muskegoncc.edu.
### YEAR 1

<table>
<thead>
<tr>
<th>Semester 1 (Fall: September - December)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 101</td>
<td>1</td>
</tr>
<tr>
<td>RESPIRATORY THERAPY PHYSICS</td>
<td></td>
</tr>
<tr>
<td>RT 102</td>
<td>3</td>
</tr>
<tr>
<td>BASIC PATIENT CARE SKILLS</td>
<td></td>
</tr>
<tr>
<td>AH 101</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL TERMINOLOGY</td>
<td></td>
</tr>
<tr>
<td>PHIL 204</td>
<td>3</td>
</tr>
<tr>
<td>BIOMEDICAL ETHICS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2 (Winter: January - February)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 111B</td>
<td>2</td>
</tr>
<tr>
<td>INTRODUCTION TO RESPIRATORY THERAPY</td>
<td></td>
</tr>
<tr>
<td>RT 110A L&amp;L</td>
<td>3</td>
</tr>
<tr>
<td>EQUIPMENT &amp; PROCEDURES I</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2 (Winter: March - April)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 120A L&amp;L</td>
<td>3</td>
</tr>
<tr>
<td>EQUIPMENT &amp; PROCEDURES II</td>
<td></td>
</tr>
<tr>
<td>RT 121</td>
<td>2</td>
</tr>
<tr>
<td>PHARMACOLOGY</td>
<td></td>
</tr>
<tr>
<td>RT 122</td>
<td>2</td>
</tr>
<tr>
<td>CLINICAL I</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 3 (Summer: May - August)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 130A L&amp;L</td>
<td>3</td>
</tr>
<tr>
<td>EQUIPMENT &amp; PROCEDURES III</td>
<td></td>
</tr>
<tr>
<td>RT 131</td>
<td>3</td>
</tr>
<tr>
<td>PHYSIOLOGY</td>
<td></td>
</tr>
<tr>
<td>RT 132</td>
<td>3</td>
</tr>
<tr>
<td>CLINICAL II</td>
<td></td>
</tr>
<tr>
<td>RT 134</td>
<td>1</td>
</tr>
<tr>
<td>INTRO TO MECHANICAL VENTILATION</td>
<td></td>
</tr>
</tbody>
</table>

### YEAR 2

<table>
<thead>
<tr>
<th>Semester 4 (Fall: September - October)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 141</td>
<td>2</td>
</tr>
<tr>
<td>PULMONARY PATHOPHYSIOLOGY</td>
<td></td>
</tr>
<tr>
<td>RT 144A</td>
<td>2</td>
</tr>
<tr>
<td>ADULT MECHANICAL VENTILATION</td>
<td></td>
</tr>
<tr>
<td>RT 152A CLI</td>
<td>3</td>
</tr>
<tr>
<td>CLINICAL IV</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4 (Fall: November - December)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 162A CLI</td>
<td>5</td>
</tr>
<tr>
<td>CLINICAL V</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 5 (Winter: January - April)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 210</td>
<td>4</td>
</tr>
<tr>
<td>CARDIOVASCULAR &amp; RENAL PHYSIOLOGY</td>
<td></td>
</tr>
<tr>
<td>RT 220C</td>
<td>4</td>
</tr>
<tr>
<td>PEDIATRIC-NEONATAL CRITICAL CARE</td>
<td></td>
</tr>
<tr>
<td>PSYC 201</td>
<td>4</td>
</tr>
<tr>
<td>GENERAL PSYCHOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 6 (Summer: May - August)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 212B</td>
<td>5</td>
</tr>
<tr>
<td>ADVANCED CLINICAL PRACTICUM I</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 7 (Fall: September - December)</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 222A</td>
<td>3</td>
</tr>
<tr>
<td>CLINICAL ROTATION VII</td>
<td></td>
</tr>
<tr>
<td>RT 230B</td>
<td>2</td>
</tr>
<tr>
<td>PULMONARY DIAGNOSTICS &amp; REHABILITATION</td>
<td></td>
</tr>
<tr>
<td>RT 240</td>
<td>1</td>
</tr>
<tr>
<td>THE HEALTH CARE ENVIRONMENT</td>
<td></td>
</tr>
<tr>
<td>BUS 122</td>
<td>3</td>
</tr>
<tr>
<td>PRINCIPLES OF MANAGEMENT</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL CREDITS FOR PROGRAM: 90
Respiratory Therapy

Respiratory Therapists work as part of the health care team in hospitals, cardiopulmonary diagnostic laboratories, rehabilitation centers, and home care agencies. They work with physicians and other health professionals in health care planning, evaluation, and treatment of patients with cardiac and pulmonary disorders.

As clinicians they perform therapeutic and life support procedures including the administration of oxygen and aerosolized medications, breathing treatments, chest physical therapy and mechanical ventilator support. In addition, they perform diagnostic tests that assess cardiac and lung function and operate physiologic monitoring equipment and life support systems in the critical care setting.

The Respiratory Therapist program is a 28-month associate degree program, which began in January 1980. It is fully accredited by the Commission on Accreditation for Respiratory Care (CoARC, www.coarc.com). The curriculum design offers the student the Associate in Applied Science Degree (AAS). Students who graduate and receive the AAS Degree will be eligible to sit for the National Board for Respiratory Care Examinations. Upon successful completion of the examination at the Certified Respiratory Therapist (CRT) level, the graduate will be able to apply for licensure. Once a graduate has successfully passed the Therapist Multiple Choice and Clinical Simulation exams, they will earn the Registered Respiratory Therapist (RRT) credential.

The curriculum for the program includes courses in the natural, behavioral, and social sciences, as well as respiratory care. Didactic and clinical instruction is integrated in a planned process that allows for concurrent presentation of respiratory care theory with associated clinical practice. For local students clinical practice takes place in most of the hospitals in West Michigan including the Grand Rapids hospitals.

Additionally, in response to the need for health professionals in Northern Michigan, the Respiratory Therapy program is providing distance education through a collaborative effort with Munson Medical Center and Northwestern Michigan College. Each member is responsible for providing a piece of the distance learning component; Muskegon Community College is the degree granting institution and provides the professional courses for the program. Munson Medical Center provides the “hands-on” clinical education required by the students and Northwestern Michigan College provides the non-professional degree requirements. All students have access to the same classroom, laboratory and clinical education, no matter the location.

Admission

General Information

To better enable individuals to validate the course competencies required for admission into the Muskegon Community College Respiratory Therapy program, and to enhance their chance for success, the following high school educational preparation is recommended:

- Biology: 1 unit
- Chemistry: 1 unit
- General Math: 1 unit
- Algebra: 2 units
- English: 3-4 units

Counseling services are available to assist students in career and educational planning (Room 1050, or call (231) 777-0362. Prospective students are strongly advised to make an appointment with the Respiratory Therapy Department (Room 2090, or call (231) 777-0223).

Individuals interested in pursuing admission are advised to make early application, as spaces are limited. Potential students must apply and be accepted to Muskegon Community College and must also apply to the Respiratory Therapy program separately. A new class starts each Fall semester. When applicants complete the entry-level requirements they are placed on a ready list. Students who have completed the entry-level requirements and have also completed non-professional courses (or non-respiratory Therapy courses), will be given preference into the program over those students who have not done so. Any applicants remaining after the available spaces are filled will need to re-apply for admission for the following year. Students who are notified of admission may defer admission once, but will need to re-apply for the following year.

Applicants on the ready list are encouraged to take the required non-respiratory therapy courses.
Entry Level Requirements

- Submit a completed Muskegon Community College Admission Application. (Online at www.muskegoncc.edu)
- Submit a completed Muskegon Community College Respiratory Therapy Program Admission Application. (Online at www.muskegoncc.edu/respiratory-therapy/rt-program-admission-application/)
- Submit official evidence of high school graduation or successful completion of the General Education Development (GED) tests. Admissions, Room 1043, or call (231) 777-0366
- Show proficiency in Reading, Writing and Math. For testing services contact the Testing Center, Room 1032 or (231) 777-0394. For Reading Placement a student must score 76-120 on Accuplacer Classic, 250-300 on Accuplacer Nextgen, 19 or higher on ACT or 25 or higher on SAT. For the Writing Placement for ENG-101, a student must score 85-120 on Accuplacer Sentence Skills, 255-300 on Accuplacer Nextgen Writing, 19 or higher on ACT English, or 26 or higher on SAT Writing & Language. For Mathematics Placement for Math-099, a student must score 40-62 on Accuplacer College-Level Mathematics, 86-120 on Accuplacer Elementary Algebra, 200-229 on Accuplacer Nextgen Adv. Algebra & Functions, 261-300 on Accuplacer Nextgen QAS, 19-21 on ACT Math, and 26-28.5 OR SAT Math.
- Students must have the ability to meet the Program Technical Standards (www.muskegoncc.edu/respiratory-therapy/rt-technical-standards/), pass a criminal background check and drug screen, and provide immunization records.
- The following courses, or their transferred equivalencies, are required to be completed and passed prior to starting the RT courses: ENG-101 English Composition, Math-099 Mathematics for Health Sciences, BIOL-152L&L Human Anatomy, BIOL-252L&L Human Physiology, CHEM-109 Chemistry for Health Sciences L&L or CHEM-100 Fundamentals of Chemistry L&L, and AH-101 Medical Terminology, (which can be taken in the Fall semester of entry into the Respiratory Therapy Program).

Advanced Placement Applicants

Applicants with prior post-secondary respiratory education are candidates for advanced placement admission into the Muskegon Community College Respiratory Therapy Program. Admission requirements:

- Submit a completed Muskegon Community College Admission Application. (Online at www.muskegoncc.edu)
- Submit a completed Muskegon Community College Respiratory Therapy Program Admission Application (Online at www.muskegoncc.edu/respiratory-therapy/rt-program-admission-application/).
- Meet with the Director of Respiratory Therapy. Room 2090-B or call (231) 777-0389.
- Meet all of the generic admission entry level requirements.
- Submit official evidence of prior post-secondary Respiratory Therapy education.
- Validate competency in the required Respiratory Therapy and non-Respiratory Therapy courses, up to point of placement, on established competency examinations.

Acceptance of Course Credit

Credits for courses completed at Muskegon Community College or other post-secondary educational institutions will be accepted toward fulfillment of the Respiratory Therapy curriculum requirements provided all of the following criteria are met:

- The courses are deemed equivalent to the courses required in the Respiratory Therapy curriculum.
- The courses were completed with a minimum grade of “C” (2.0).

Official transcripts from institutions other than Muskegon Community College should be sent to the Office of the Registrar for credit evaluation Room 1048J, or call (231) 777-0310.

Progression and Retention

To progress, students in the Muskegon Community College Respiratory Therapy Program must attain a minimum grade of “C” (2.0) in each science and Respiratory Therapy course in each semester of the Respiratory Therapy curriculum. Students failing to meet this requirement will be dismissed. Students are strongly advised to complete all non-RT courses prior to the Fall semester they are entering the Program. Failure to do so could extend
Readmission
Students may apply for readmission providing they meet all general education and course competency requirements and have not repeated a Respiratory Therapy course more than once. When readmission requirements have been met, the student will be readmitted according to availability of space in the program. This does not guarantee a student a seat in the program simply because they re-apply. Failure to attain a passing grade in a repeated Respiratory Therapy course will render students ineligible for readmission. For the full Readmission Policy, visit the RT website or the link listed. In all instances where a student is considering readmission, the student must meet with the Program Director to determine eligibility. www.muskegoncc.edu(degrees-and-certificates/wp-content/uploads/sites/127/2017/10/RT-Program-Re-admission-Policy.pdf

Graduation
To be eligible for graduation from the Respiratory Therapy Program, students must meet all of the following requirements:
1. Complete the Respiratory Therapy curriculum requirements for the degree with a minimum grade point of 2.0.
2. Complete not fewer than the last 15 credit hours required in the Respiratory Therapy curriculum at Muskegon Community College.
3. File an application for graduation at the beginning of the semester of the anticipated graduation.

Health Status Evaluation
Students in the Muskegon Community College Respiratory Therapy Program are required to have a health status evaluation (a physical), done by a licensed health practitioner prior to beginning the first clinical RT course. Each student admitted into the program will be given specific health information requirements during a mandatory orientation. Along with the health requirements each student will be given instructions for obtaining a required Drug Screen. A student must have a clean drug screen to remain in the program. Random drug screens may be administered any time throughout the program. Since all students will be in clinical rotations throughout various hospitals, it is recognized they may come in contact with various organisms in the environment that can cause illness. Therefore, a strict immunization and health policy is followed.

Criminal Background Check
Students are required by Michigan law to pass a criminal background check ensuring no felony history for the past 15 years and no history of misdemeanors including domestic violence, abuse, neglect, fraud, theft, or assault and battery within the past 10 years. Any student with a history of substance abuse or criminal conviction related to illegal drugs may be ineligible for Respiratory Therapy state licensure. Any student who has not resided in Michigan for at least three or more years preceding application for admission to the Respiratory Therapy Program is required to obtain an FBI fingerprint check. The student is responsible for the cost of the FBI check and criminal background check.
Associate in Applied Science

Surgical Technology

(5-Semester Program)

This program is available to apprenticeship students only at this time.

The Surgical Technology Program at MCC is an Associate Degree in Applied Science program that will be accredited by the Commission of Allied Health Education Programs (CAAHEP). This program includes courses that lead to a Sterile Processing Certificate. The curriculum includes science courses selected to provide a basis for the clinical and theory application of principles used in Surgical Technology. Basic courses in the theoretical aspects of Surgical Technology include lecture, clinical, and on-line instruction. All Surgical Technology courses must be passed with a minimum grade of C+. The goal of the program is to prepare students who graduate with the ability to demonstrate competence in the areas of cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Throughout the program, students are provided with hands-on experience in cooperation with various hospitals under the direction of the Program Director/Instructor. Upon completion of the program, students will be eligible to take the National Board Certification Examination administered by PSI Testing and endorsed by the National Board of Surgical Technology and Surgical Assisting (NBSTSA). This examination has been incorporated into the program at the student’s expense and is non-refundable.

Collaborative Program Model

The Collaborative surgical Technology Consortium program model allows for apprentices (and eventually traditional college students) to attain the Associate of Applied Science degree in Surgical Technology and take the National board examination. Lab and practicum education sites will be dependent on student location. Consortium students will take their general education courses through their degree-granting college. Core courses will be taken through the Michigan Colleges Online (MCO). The MCO allows seamless transfer of courses between the provider college (MCC) and the degree-granting college. Each partner college will provide preceptors and practicum education sites within their service area for students accepted into the program.
<table>
<thead>
<tr>
<th>YEAR 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 1 (Fall: September - December)</strong></td>
<td><strong>CR. HRS.</strong></td>
</tr>
<tr>
<td>BIOL-152 L&amp;L</td>
<td>4</td>
</tr>
<tr>
<td>HUMAN ANATOMY</td>
<td></td>
</tr>
<tr>
<td>ST-101</td>
<td>2</td>
</tr>
<tr>
<td>SURGICAL ASEPSIS</td>
<td></td>
</tr>
<tr>
<td>ST-102</td>
<td>2</td>
</tr>
<tr>
<td>STERILE PROCESSING I</td>
<td></td>
</tr>
<tr>
<td><strong>Semester 2 (Winter: January - February)</strong></td>
<td><strong>CR. HRS.</strong></td>
</tr>
<tr>
<td>AH-101</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL TERMINOLOGY</td>
<td></td>
</tr>
<tr>
<td>BIOL-252 L&amp;L</td>
<td>4</td>
</tr>
<tr>
<td>HUMAN PHYSIOLOGY</td>
<td></td>
</tr>
<tr>
<td>ENG-101</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td></td>
</tr>
<tr>
<td>ST-103</td>
<td>3</td>
</tr>
<tr>
<td>STERILE PROCESSING EXTERNSHIP (PRACTICUM)</td>
<td></td>
</tr>
<tr>
<td><strong>Semester 3 (Summer: May - August)</strong></td>
<td><strong>CR. HRS.</strong></td>
</tr>
<tr>
<td>COM-101</td>
<td>3</td>
</tr>
<tr>
<td>ORAL COMMUNICATIONS</td>
<td></td>
</tr>
<tr>
<td>SOC-101</td>
<td>3</td>
</tr>
<tr>
<td>PRINCIPLES OF SOCIOLOGY</td>
<td></td>
</tr>
<tr>
<td>PHIL-204</td>
<td>3</td>
</tr>
<tr>
<td>BIOMEDICAL ETHICS</td>
<td></td>
</tr>
<tr>
<td>ST-100</td>
<td>2</td>
</tr>
<tr>
<td>THE SURGICAL PATIENT</td>
<td></td>
</tr>
<tr>
<td>ST-110</td>
<td>3</td>
</tr>
<tr>
<td>FUNDAMENTALS OF SURGICAL TECHNOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 4 (Fall: September - October)</strong></td>
<td><strong>CR. HRS.</strong></td>
</tr>
<tr>
<td>ST-115</td>
<td>2</td>
</tr>
<tr>
<td>SURGICAL PHARMACOLOGY</td>
<td></td>
</tr>
<tr>
<td>ST-150</td>
<td>2</td>
</tr>
<tr>
<td>BASIC OPERATIVE PROCEDURES</td>
<td></td>
</tr>
<tr>
<td>ST-200</td>
<td>2</td>
</tr>
<tr>
<td>SURGICAL SPECIALTY/PROFESSIONAL PREPARATION</td>
<td></td>
</tr>
<tr>
<td>ST-210</td>
<td>2</td>
</tr>
<tr>
<td>APPLIED SURGICAL TECHNIQUES I (LAB) 8 WEEKS</td>
<td></td>
</tr>
<tr>
<td>ST-211</td>
<td>2</td>
</tr>
<tr>
<td>APPLIED SURGICAL TECHNIQUES II (LAB) 8 WEEKS</td>
<td></td>
</tr>
<tr>
<td><strong>Semester 5 (Winter: January - April)</strong></td>
<td><strong>CR. HRS.</strong></td>
</tr>
<tr>
<td>ST-151</td>
<td>6</td>
</tr>
<tr>
<td>ADVANCED SURGICAL PROCEDURES</td>
<td></td>
</tr>
<tr>
<td>ST-212</td>
<td>4</td>
</tr>
<tr>
<td>APPLIED SURGICAL TECHNIQUES III (PRACTICUM)</td>
<td></td>
</tr>
<tr>
<td>ST-213</td>
<td>4</td>
</tr>
<tr>
<td>APPLIED SURGICAL TECHNIQUES IV (PRACTICUM)</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS : 63**
Associate in Applied Science
Accounting and Bookkeeping Services

This degree provides the foundation skills needed to create and maintain the records required to support the operation of a small business as part of an independent bookkeeping services business. The student will learn the accounting cycle used by small businesses to prepare financial statements and tax returns. Courses will cover managing a small business as well as offering advice to small business owners. Other courses will cover the important business topics of ethics in business, payroll tax return preparation, computer information systems, business communications as well as popular small business accounting software. Students completing this program will understand the challenges in managing a small business.

**GENERAL EDUCATION REQUIREMENTS** 18 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 102</td>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>BUS 126</td>
<td>BUSINESS MATH</td>
<td>3</td>
</tr>
<tr>
<td>CIS 120A</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 205</td>
<td>BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>BUS 127</td>
<td>HUMAN RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td>COM 101</td>
<td>ORAL COMMUNICATIONS</td>
<td>3</td>
</tr>
</tbody>
</table>

**BUSINESS CORE REQUIREMENTS** 14 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 123</td>
<td>BUSINESS LAW</td>
<td>3</td>
</tr>
<tr>
<td>BUS 131</td>
<td>INTRODUCTION TO ENTREPRENEURSHIP</td>
<td>1</td>
</tr>
<tr>
<td>BUS 223</td>
<td>STARTING YOUR BUSINESS PLAN</td>
<td>4</td>
</tr>
<tr>
<td>BUS 260</td>
<td>PRINCIPLES OF MARKETING</td>
<td>3</td>
</tr>
<tr>
<td>BUS 161A</td>
<td>EFFECTIVE SELLING</td>
<td>3</td>
</tr>
<tr>
<td>BUS 122</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
</tr>
</tbody>
</table>

**DEGREE REQUIREMENTS** 25 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>PRINCIPLES OF ACCOUNTING I</td>
<td>4</td>
</tr>
<tr>
<td>ACC 202</td>
<td>PRINCIPLES OF ACCOUNTING II</td>
<td>4</td>
</tr>
<tr>
<td>ACC 206</td>
<td>QUICKBOOKS COMPUTERIZED ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>ACC 220</td>
<td>FEDERAL TAXATION</td>
<td>3</td>
</tr>
<tr>
<td>BUS 180D</td>
<td>WORD PROCESSING PART I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 181C</td>
<td>OFFICE PROCEDURES I: DOCUMENT FORMATTING</td>
<td>3</td>
</tr>
<tr>
<td>BUS 182C</td>
<td>OFFICE PROCEDURES II: DOCUMENT PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>BUS 101EW</td>
<td>INTRODUCTION TO ELECTRONIC SPREADSHEETS</td>
<td>1</td>
</tr>
<tr>
<td>BUS 102EW</td>
<td>INTERMEDIATE ELECTRONIC SPREADSHEETS</td>
<td>1</td>
</tr>
</tbody>
</table>

**RECOMMEND ELECTIVES** (Minimum 5 CR. HRS.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 100</td>
<td>FUNDAMENTALS OF ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>BUS 114</td>
<td>PERSONAL FINANCE</td>
<td>3</td>
</tr>
<tr>
<td>BUS 166</td>
<td>QUALITY CUSTOMER SERVICE</td>
<td>3</td>
</tr>
<tr>
<td>BUS 179</td>
<td>KEYBOARDING</td>
<td>1</td>
</tr>
<tr>
<td>CIS 115WW</td>
<td>WORD PROCESSING</td>
<td>1</td>
</tr>
<tr>
<td>BUS 153A</td>
<td>DATABASE MANAGEMENT - ACCESS</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL 62**
Associate in Applied Science
Management

The following program is not designed for the student wishing to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor. The Management Program focuses on Management Development and Supervision. The program is designed to develop knowledge, attitudes, experience, and leadership skills, which will enable graduates to function in positions as supervisors or managers in business and industry.

GENERAL EDUCATION REQUIREMENTS 18-20 CR. HRS.

ENG 101 .................................................................3
ENGLISH COMPOSITION

BCOM 102 ...............................................................3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127 .................................................................3
HUMAN RELATIONS

Choose One (1) Course From: ......................................3-4
BUS 126  BUSINESS MATH
MATH 109A  COLLEGE ALGEBRA
MATH 115A  PROBABILITY AND STATISTICS

Choose One (1) Course From: ......................................3
CIS 110  COMPUTER CONCEPTS
CIS 120A  INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From: ......................................3-4
GEOG 104  CULTURAL GEOGRAPHY
PHIL 205  BUSINESS ETHICS
PSCI 111  INTRO TO AMERICAN GOVERNMENT
PSCI 211  COMPARATIVE GOVERNMENTS
PSYC 102  APPLIED PSYCHOLOGY
PSYC 201  GENERAL PSYCHOLOGY

BUSINESS CORE REQUIREMENTS 10 CR. HRS.

ACC 201 .................................................................4
PRINCIPLES OF ACCOUNTING I

BUS 121 .................................................................3
INTRODUCTION TO BUSINESS

BUS 200 .................................................................3
INTERNATIONAL BUSINESS

CAREER PROGRAM REQUIREMENTS 22 CR. HRS.

BUS 122 .................................................................3
PRINCIPLES OF MANAGEMENT

BUS 123 .................................................................3
BUSINESS LAW I

BUS 125 .................................................................3
SUPERVISION

BUS 166 .................................................................3
QUALITY CUSTOMER SERVICE

BUS 167 .................................................................1
PROFESSIONALISM IN YOUR CAREER

BUS 222 .................................................................3
FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOR

BUS 260 .................................................................3
PRINCIPLES OF MARKETING

BUS 273A ...............................................................3
HUMAN RESOURCE MANAGEMENT

RECOMMENDED ELECTIVES (Minimum 10-12 CR. HRS.)

ACC 202 .................................................................4
PRINCIPLES OF ACCOUNTING II

BUS 114 .................................................................3
PERSONAL FINANCE

BUS 131 .................................................................1
INTRODUCTION TO ENTREPRENEURSHIP

BUS 161A ...............................................................3
EFFECTIVE SELLING

BUS 204 .................................................................3
eMARKETING

BUS 220 .................................................................3
E-BUSINESS

BUS 223 .................................................................4
STARTING YOUR BUSINESS PLAN

BUS 240 .................................................................3
ENTREPRENEURSHIP CAPSTONE

BUS 290CI ...............................................................3
COOPERATIVE INTERNSHIP PROGRAM

CIS 101EW ...........................................................1
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 120A .................................................................3
INTRO TO COMPUTER INFORMATION SYSTEMS

QC 105 .................................................................3
QUALITY AND PRODUCTIVITY USING

SPC-STATISTICAL PROCESS CONTROL

TOTAL 62

2023 - 2024 Muskegon Community College Catalog - 107
Associate in Applied Science
Marketing

The following program is not designed for the student wishing to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor. The Marketing Program focusing on marketing applications and supervision. The Marketing program is a two-year curriculum designed to develop knowledge, attitudes, experience, and leadership skills, which will enable graduates to function in marketing positions.

**GENERAL EDUCATION REQUIREMENTS** 18-20 CR. HRS.

- ENG 101 ................................................................. 3
- ENGLISH COMPOSITION
- BCOM 102 ............................................................... 3
- ADVANCED BUS AND TECH COMMUNICATIONS
- BUS 127 ................................................................. 3
- HUMAN RELATIONS

Choose One (1) Course From:

- BUS 126 BUSINESS MATH
- MATH 109A COLLEGE ALGEBRA
- MATH 115A PROBABILITY AND STATISTICS

Choose One (1) Course From:

- CIS 110 COMPUTER CONCEPTS
- CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From:

- GEOG 104 CULTURAL GEOGRAPHY
- PHIL 205 BUSINESS ETHICS
- PSCI 111 INTRO TO AMERICAN GOVERNMENT
- PSCI 211 COMPARATIVE GOVERNMENTS
- PSYC 102 APPLIED PSYCHOLOGY
- PSYC 201 GENERAL PSYCHOLOGY

**BUSINESS CORE REQUIREMENTS** 10 CR. HRS.

- ACC 201 .................................................................... 4
- PRINCIPLES OF ACCOUNTING I
- BUS 121 ..................................................................... 3
- INTRODUCTION TO BUSINESS
- BUS 200 ..................................................................... 3
- INTERNATIONAL BUSINESS

**CAREER PROGRAM REQUIREMENTS** 25 CR. HRS.

- BUS 123 ................................................................. 3
- BUSINESS LAW I
- BUS 161A ............................................................... 3
- EFFECTIVE SELLING
- BUS 162 ................................................................. 3
- PRINCIPLES OF RETAILING
- BUS 166 ................................................................. 3
- QUALITY CUSTOMER SERVICE
- BUS 167 ................................................................. 1
- PROFESSIONALISM IN YOUR CAREER
- BUS 204 ..................................................................... 3
- eMARKETING
- BUS 260 ................................................................. 3
- PRINCIPLES OF MARKETING
- BUS 263 ..................................................................... 3
- ADVERTISING DYNAMICS

Choose One (1) Course From:

- BUS 122 PRINCIPLES OF MANAGEMENT
- BUS 125 SUPERVISION

**RECOMMENDED ELECTIVES** 7-9 CR. HRS.

- ACC 202 ................................................................. 4
- PRINCIPLES OF ACCOUNTING II
- BUS 114 ..................................................................... 3
- PERSONAL FINANCE
- BUS 131 ..................................................................... 1
- INTRODUCTION TO ENTREPRENEURSHIP
- BUS 220 ..................................................................... 3
- E-BUSINESS
- BUS 222 ..................................................................... 3
- FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOR
- BUS 223 ..................................................................... 4
- STARTING YOUR BUSINESS PLAN
- BUS 240 ..................................................................... 3
- ENTREPRENEURSHIP CAPSTONE
- BUS 266 ..................................................................... 3
- QUALITY CUSTOMER SERVICE II
- BUS 290C ............................................................... 3
- COOPERATIVE INTERNSHIP PROGRAM
- CIS 120A.................................................................... 3
- INTRO TO COMPUTER INFORMATION SYSTEMS

TOTAL 62
Associate in Applied Science
Digital Game Development (with Michigan Transfer Agreement)

Digital Game Development will prepare students for entry into the world of interactive media and game design. Core requirements will expose the student to real world development of game systems, effective teamwork in a multidisciplinary setting, understand the video game and interactive media industry as well as being able to map video game features to target market needs. Students transform their perspective from player to provider and acquire understanding of how development teams work in this fast paced and constantly changing industry. This degree prepares students for entry-level positions as game scripters, game programmers, assistant producers, game designers, Quality Assurance engineers, and level designers. Transfer-oriented students interested in working with computers should consult with a counselor. A grade of “C” or better is required in all General Education classes to fulfill the Michigan Transfer Agreement.

GENERAL EDUCATION REQUIREMENTS 34-38 CR. HRS.

ENG 101 ENGLISH COMPOSITION ................................................................. 3
ENG 102 ENGLISH COMPOSITION ................................................................. 3
COM 201 PUBLIC SPEAKING ........................................................................ 3
ART 198 ART HISTORY I ............................................................................. 3
GEOG 104 CULTURAL GEOGRAPHY .......................................................... 3
PSCI 202 INTERNATIONAL RELATIONS ..................................................... 3

Choose One (1) Course From: ......................................................... 4-5
MATH 115A PROBABILITY AND STATISTICS
MATH 141 PRECALCULUS

Choose One (1) Course From: ......................................................... 3
ENG 211 WORLD MYTHOLOGY
ENG 218A HORROR, FANTASY AND SCIENCE FICTION

Choose One (1) Course From: ......................................................... 3
PHIL 102 PRINCIPLES OF LOGIC
PHIL 104 SYMBOLIC LOGIC

SCIENCE REQUIREMENTS 6-9 CR. HRS.

Science credits require grades of “C” or better. Courses must be in two or more disciplines (subjects). Must include at least one lab science.

Lab Classes:
BIOL - ANY MCC BIOLOGY COURSE WITH A LAB
CHEMISTRY - ANY MCC CHEMISTRY COURSE WITH A LAB
ENV 110L&L ENVIRONMENTAL SCIENCE
GEOG 215 INTRODUCTION TO WEATHER AND CLIMATE
GEOG 211 PHYSICAL GEOGRAPHY
GEOG 250LEC CORAL REEF ECOLOGY LECTURE
GEOG 101A INTRODUCTION TO PHYSICAL GEOLOGY
GEOG 201 INTRODUCTION TO EARTH HISTORY
PHSC 101A INTRODUCTORY PHYSICAL SCIENCE LECTURE AND LAB
PHYS 201CL&L COLLEGE PHYSICS I LECTURE AND LAB
PHYS 202CL&L COLLEGE PHYSICS II LECTURE AND LAB
PHYS 203L&L ENGINEERING PHYSICS I

Non-Lab Classes:
ASTR 101 GENERAL ASTRONOMY
ASTR 105A COSMOLOGY
BIOI 115 INTRODUCTION TO ANATOMY AND PHYSIOLOGY
BIOI 200 INTRODUCTORY EVOLUTION
BIOI 214 SCIENCE OF CLIMATE CHANGE
BIOI 260 GEOSCIENCE FIELD EXPERIENCE
BIOI 100 NATURAL DISASTERS
BIOI 201 OCEANOGRAPHY
BIOI 250LEC CORAL REEF ECOLOGY LECTURE

CAREER PROGRAM REQUIREMENTS 24 CR. HRS.

BUS 108 INTRODUCTION TO PROJECT MANAGEMENT .................................. 3
BUS 127 HUMAN RELATIONS .................................................................... 3
CIS 120A INTRODUCTION TO COMPUTER INFORMATION SYSTEMS .......... 3
CIS 124 INTRODUCTION TO GAME DEVELOPMENT .................................... 3
CIS 185 C PROGRAMMING ....................................................................... 3
CIS 244 GAME SCRIPTING ....................................................................... 3
CIS 284 INTERACTIVE MEDIA AND GAME DESIGN .................................. 3
GRD 120 INTRODUCTION TO GRAPHIC DESIGN ....................................... 3

ELECTIVES 0-4 CR. HRS.

TOTAL 62
Entrepreneurship Certificate

This certificate is designed for community members or students who have a specific idea for starting a business and want to follow one of two paths: 1) Create a business plan while at the same time refine their business idea with the desire to start their business within the next five years, or, 2) Create/refine their business plan and start their business as soon as possible after completing the Certificate.

<table>
<thead>
<tr>
<th>CERTIFICATE REQUIREMENTS</th>
<th>17 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 131</td>
<td>1</td>
</tr>
<tr>
<td>INTRODUCTION TO ENTREPRENEURSHIP</td>
<td></td>
</tr>
<tr>
<td>BUS 204</td>
<td>3</td>
</tr>
<tr>
<td>eMARKETING</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3</td>
</tr>
<tr>
<td>BUS 161A - EFFECTIVE SELLING</td>
<td></td>
</tr>
<tr>
<td>BUS 220 - E-BUSINESS</td>
<td></td>
</tr>
<tr>
<td>BUS 166</td>
<td>3</td>
</tr>
<tr>
<td>QUALITY CUSTOMER SERVICE</td>
<td></td>
</tr>
<tr>
<td>BUS 223</td>
<td>4</td>
</tr>
<tr>
<td>STARTING YOUR BUSINESS PLAN</td>
<td></td>
</tr>
<tr>
<td>BUS 240</td>
<td>3</td>
</tr>
<tr>
<td>ENTREPRENEURSHIP CAPSTONE</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL 17
Customer Service Specialist Certificate

This certificate is part of the program leading to the Associate in Applied Science in Marketing Degree.

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 127 HUMAN RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td>BUS 161A EFFECTIVE SELLING</td>
<td>3</td>
</tr>
<tr>
<td>BUS 266 QUALITY CUSTOMER SERVICE</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
</tr>
</tbody>
</table>
Computer Networking CISCO Certificate

The Computer Networking CISCO Certificate program is a gateway to entry-level networking jobs and IT careers. CISCO Certified Network Associate (CCNA) Routing and Switching curriculum builds the skills necessary to succeed in jobs related to networking computers and devices. This program will prepare students to sit for CompTIA Network+, CISCO Certified Entry Network Technician (CCENT), and CISCO CCNA. Computer networks are critical parts of almost every organization. Network and computer systems administrators are responsible for the day-to-day operation of these networks. Network and computer systems administrators work with the physical computer networks in a variety of organizations and therefore are employed in many industries. Network and Computer System administrators also find work as Network Administrators or Network Support Specialists. Other career information includes: Network Administrator (O*Net OnLine) (Bureau of Labor Statics), Network Support Specialist (O*Net OnLine) (Bureau of Labor Statistics). This program is not designed for students wishing to transfer to a four-year college for a bachelor’s degree. Students planning to transfer should consult with an MCC counselor. Potential transfer schools include Ferris State University, Grand Valley State University, Western Michigan University.

CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 109A</td>
<td>COMP TIA A+ PART A</td>
<td>2</td>
</tr>
<tr>
<td>CIS 120A</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 104A</td>
<td>INTRODUCTION TO NETWORKS (CISCO 1)</td>
<td>4</td>
</tr>
<tr>
<td>CIS 105A</td>
<td>SWITCHING, ROUTING &amp; WIRELESS (CISCO 2)</td>
<td>4</td>
</tr>
<tr>
<td>CIS 183</td>
<td>NETWORKING TECHNOLOGIES</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202A</td>
<td>IT SEC &amp; AUTOMATION (CISCO 3)</td>
<td>4</td>
</tr>
<tr>
<td>CIS 204</td>
<td>CCNA CYBERSECURITY (CISCO 4)</td>
<td>4</td>
</tr>
<tr>
<td>ANY CIS ELECTIVE</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 27
The following program is for AAS Degree students interested in careers which require extensive knowledge of the local and wide area networks. Students receiving an AAS Degree in Networking and IT Security can create, install and maintain local area networks and are knowledgeable about the protocols and hardware used to transfer data across wide area networks. They learn to work within different network environments and use the latest networking technologies. This degree will prepare a student for multiple certifications including CompTIA A+, Network+ Security+, and CISCO CCNA (Cisco Certified Networking Associate), and CCNA CyberOps. This degree is not designed for students wishing to transfer to four-year institutions. Transfer-oriented students interested in working with computers should consult with a counselor.

### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 102 ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td><strong>Choose One (1) Course From:</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 126 BUSINESS MATH</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 109A COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td><strong>Choose One (1) Course From:</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 127 HUMAN RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td>COM 201 PUBLIC SPEAKING</td>
<td></td>
</tr>
</tbody>
</table>

### Business Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choose One (1) Course From:</strong></td>
<td>3</td>
</tr>
<tr>
<td>BUS 121 INTRODUCTION TO BUSINESS</td>
<td></td>
</tr>
<tr>
<td>BUS 122 PRINCIPLES OF MANAGEMENT</td>
<td></td>
</tr>
</tbody>
</table>

### Career Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 290CI2</td>
<td>2</td>
</tr>
<tr>
<td><strong>COOPERATIVE INTERNSHIP PROGRAM</strong></td>
<td></td>
</tr>
<tr>
<td>CIS 104A</td>
<td>4</td>
</tr>
<tr>
<td>CIS 105A INTRODUCTION TO NETWORKS (CISCO 1)</td>
<td>4</td>
</tr>
<tr>
<td>CIS 109A SWITCHING, ROUTING &amp; WIRELESS (CISCO 2)</td>
<td>2</td>
</tr>
<tr>
<td>CIS 109A</td>
<td>2</td>
</tr>
<tr>
<td>CIS 142 COMP TIA A+ PART A</td>
<td>3</td>
</tr>
<tr>
<td>CIS 143A WINDOWS CLIENT ADMINISTRATION</td>
<td>3</td>
</tr>
<tr>
<td>CIS 183 NETWORKING TECHNOLOGIES</td>
<td>3</td>
</tr>
<tr>
<td>CIS 185 C PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>CIS 204 IT SEC &amp; AUTOMATION (CISCO 3)</td>
<td>4</td>
</tr>
<tr>
<td>CIS 209A CCNA CYBERSECURITY (CISCO 4)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 275 COMP TIA A+ PART B</td>
<td>3</td>
</tr>
<tr>
<td>CIS 283A LINUX OPERATING SYSTEM</td>
<td>3</td>
</tr>
<tr>
<td>CIS 293A WINDOW SERVER ADMIN II</td>
<td>3</td>
</tr>
<tr>
<td>CIS 293A NETWORK SECURITY</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 62-63**
# Associate in Applied Science

## Information Technology Support

Students receiving an AAS Degree in Information Technology Support are prepared to provide technical assistance to computer users concerning the use of computer hardware and software. This degree is not designed for students wishing to transfer to four-year institutions. Transfer-oriented students interested in working with computers should consult with a counselor.

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS</th>
<th>18-19 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION</td>
</tr>
<tr>
<td>BCOM 102</td>
<td>3</td>
</tr>
<tr>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>BUS 127</td>
<td>HUMAN RELATIONS</td>
</tr>
<tr>
<td>CIS 120A</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3-4</td>
</tr>
<tr>
<td>BUS 126</td>
<td>BUSINESS MATH</td>
</tr>
<tr>
<td>MATH 109A</td>
<td>COLLEGE ALGEBRA</td>
</tr>
<tr>
<td>MATH 115A</td>
<td>PROBABILITY AND STATISTICS</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>INTRODUCTION TO ETHICS</td>
</tr>
<tr>
<td>PHIL 205</td>
<td>BUSINESS ETHICS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUSINESS CORE REQUIREMENTS</th>
<th>10 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 121</td>
<td>INTRODUCTION TO BUSINESS</td>
</tr>
<tr>
<td>BUS 179</td>
<td>KEYBOARDING</td>
</tr>
<tr>
<td>BUS 167</td>
<td>PROFESSIONALISM IN YOUR CAREER</td>
</tr>
<tr>
<td>BUS 220</td>
<td>E-BUSINESS</td>
</tr>
<tr>
<td>BUS 290CI</td>
<td>COOPERATIVE INTERNSHIP PROGRAM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAREER PROGRAM REQUIREMENTS</th>
<th>33 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 166</td>
<td>QUALITY CUSTOMER SERVICE</td>
</tr>
<tr>
<td>CIS 101EW</td>
<td>INTRODUCTION TO ELECTRONIC SPREADSHEETS</td>
</tr>
<tr>
<td>CIS 102EW</td>
<td>INTERMEDIATE ELECTRONIC SPREADSHEETS</td>
</tr>
<tr>
<td>CIS 109A</td>
<td>COMP TIA A+ - PART A</td>
</tr>
<tr>
<td>CIS 115WW</td>
<td>INTRODUCTION TO WORD PROCESSING</td>
</tr>
<tr>
<td>CIS 119PP</td>
<td>INTRODUCTION TO PRESENTATION GRAPHICS</td>
</tr>
<tr>
<td>CIS 131</td>
<td>OPERATIONS &amp; COMMANDS FOR MID-RANGE COMPUTERS</td>
</tr>
<tr>
<td>CIS 142</td>
<td>WINDOWS CLIENT ADMINISTRATION</td>
</tr>
<tr>
<td>CIS 143A</td>
<td>WINDOWS SERVER ADMIN I</td>
</tr>
<tr>
<td>CIS 153A</td>
<td>DATABASE MANAGEMENT-ACCESS</td>
</tr>
<tr>
<td>CIS 183</td>
<td>NETWORKING TECHNOLOGIES</td>
</tr>
<tr>
<td>CIS 199</td>
<td>INTERNET CONTENT MANAGEMENT SYSTEMS</td>
</tr>
<tr>
<td>CIS 209A</td>
<td>COMP TIA A+ - PART B</td>
</tr>
<tr>
<td>CIS 253A</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
</tr>
<tr>
<td>CIS 257A</td>
<td>HTML FOR INTERNET WEB DESIGN</td>
</tr>
<tr>
<td>GRD 110</td>
<td>PRINCIPLES OF DESIGN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVES</th>
<th>0-1 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTIVES</td>
<td>0-1</td>
</tr>
</tbody>
</table>

**TOTAL 62**
## Associate in Applied Science
### Software Development

Students receiving an AAS Degree in Software Development become familiar with several programming languages and develop procedural, object-oriented, and web applications. This degree prepares students for entry-level positions as programmers and developers. Transfer-oriented students interested in working with computers should consult with a counselor.

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>18-19 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 102 ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
</tbody>
</table>

*Choose One (1) Course From: 3-4*

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 126 BUSINESS MATH</td>
<td></td>
</tr>
<tr>
<td>MATH 109A COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td>PHIL 205 BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 202 INTRODUCTION TO ETHICS</td>
<td></td>
</tr>
</tbody>
</table>

*Choose One (1) Course From: 3*

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 ORAL COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>COM 201 PUBLIC SPEAKING</td>
<td></td>
</tr>
</tbody>
</table>

### BUSINESS CORE REQUIREMENTS

<table>
<thead>
<tr>
<th>COURSES</th>
<th>7 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 121 INTRODUCTION TO BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>BUS 167 PROFESSIONALISM IN YOUR CAREER</td>
<td>1</td>
</tr>
<tr>
<td>BUS 220 E-BUSINESS</td>
<td>3</td>
</tr>
</tbody>
</table>

### CAREER PROGRAM REQUIREMENTS

<table>
<thead>
<tr>
<th>COURSES</th>
<th>37 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 121</td>
<td>1</td>
</tr>
<tr>
<td>CIS 153A FILE DESIGN &amp; UTILITIES FOR MIDRANGE COMPUTERS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 170 DATABASE MANAGEMENT-ACCESS</td>
<td></td>
</tr>
<tr>
<td>CIS 185 C PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>CIS 199 INTERNET CONTENT MANAGEMENT SYSTEMS</td>
<td>1</td>
</tr>
</tbody>
</table>

*Students should see a counselor regarding Math requirements*
# C/Java Programming Certificate

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 120A</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 153A</td>
<td>DATABASE MANAGEMENT-ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 185</td>
<td>C PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>CIS 228</td>
<td>JAVASCRIPT</td>
<td>3</td>
</tr>
<tr>
<td>CIS 250</td>
<td>DEVELOPING INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 253A</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>CIS 257A</td>
<td>HTML FOR INTERNET WEB DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>CIS 280</td>
<td>JAVA PROGRAMMING</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 22**
## Midrange Programming Certificate

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 120A</td>
<td>Intro to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 121</td>
<td>File Design and Utilities for Midrange Computers</td>
<td>1</td>
</tr>
<tr>
<td>CIS 131</td>
<td>Operations and Commands for Midrange Computers</td>
<td>1</td>
</tr>
<tr>
<td>CIS 153A</td>
<td>Database Management-Access</td>
<td>1</td>
</tr>
<tr>
<td>CIS 170</td>
<td>RPG Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 250</td>
<td>Developing Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 253A</td>
<td>Database Design and Implementation</td>
<td>3</td>
</tr>
<tr>
<td>CIS 257A</td>
<td>HTML for Internet Web Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 267PHP</td>
<td>Server-Side Web Programming Using PHP</td>
<td>3</td>
</tr>
<tr>
<td>CIS 270A</td>
<td>Advanced RPG Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 24**
## Associate in Applied Science
### Web Design

The Web Design AAS Degree is designed for students interested in careers which require extensive knowledge of the internet including web designers, web developers, internet content creators, online marketers and producers. Students receiving an AAS Degree in Web Design can create web sites, set up operational e-commerce sites, make effective use of web servers and are knowledgeable about the protocols and associated technologies used to transfer data across the Internet. They learn to work within wide-area networks and develop new web sites using video and graphics manipulation technologies, content management systems, HTML, CSS, JavaScript and PHP coding.

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS</th>
<th>20-22 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH</td>
<td></td>
</tr>
<tr>
<td>BCOM 102</td>
<td>3</td>
</tr>
<tr>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td></td>
</tr>
<tr>
<td>CIS 120A</td>
<td>3</td>
</tr>
<tr>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3-4</td>
</tr>
<tr>
<td>BUS 126</td>
<td></td>
</tr>
<tr>
<td>MATH 109A</td>
<td></td>
</tr>
<tr>
<td>MATH 109A</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3</td>
</tr>
<tr>
<td>BUS 127</td>
<td></td>
</tr>
<tr>
<td>COM 101</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3-4</td>
</tr>
<tr>
<td>GEOG 104</td>
<td></td>
</tr>
<tr>
<td>PHIL 205</td>
<td></td>
</tr>
<tr>
<td>PSY 102</td>
<td></td>
</tr>
<tr>
<td>PSY 201</td>
<td></td>
</tr>
<tr>
<td>PEA/DNC</td>
<td></td>
</tr>
<tr>
<td>One credit hour from: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 and One PEA/DNC credit hour of choice</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUSINESS CORE REQUIREMENTS</th>
<th>12 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 121</td>
<td>3</td>
</tr>
<tr>
<td>BUS 204</td>
<td>3</td>
</tr>
<tr>
<td>BUS 220</td>
<td>3</td>
</tr>
<tr>
<td>BUS 260</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAREER PROGRAM REQUIREMENTS</th>
<th>30 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 167</td>
<td>1</td>
</tr>
<tr>
<td>PROFESSIONALISM IN YOUR CAREER</td>
<td></td>
</tr>
<tr>
<td>CIS 153A</td>
<td>1</td>
</tr>
<tr>
<td>DATABASE MANAGEMENT-ACCESS</td>
<td></td>
</tr>
<tr>
<td>CIS 199</td>
<td>1</td>
</tr>
<tr>
<td>INTERNET CONTENT MANAGEMENT SYSTEMS-CMS</td>
<td></td>
</tr>
<tr>
<td>CIS 228</td>
<td>3</td>
</tr>
<tr>
<td>JAVASCRIPT</td>
<td></td>
</tr>
<tr>
<td>CIS 257A</td>
<td>3</td>
</tr>
<tr>
<td>HTML FOR INTERNET WEB PAGE DESIGN</td>
<td></td>
</tr>
<tr>
<td>CIS 258</td>
<td>3</td>
</tr>
<tr>
<td>ADVANCED HTML WEB DEVELOPMENT</td>
<td></td>
</tr>
<tr>
<td>CIS 267PHP</td>
<td>3</td>
</tr>
<tr>
<td>SERVER-SIDE WEB PROGRAMMING USING PHP</td>
<td></td>
</tr>
<tr>
<td>CIS 287A</td>
<td>3</td>
</tr>
<tr>
<td>DIGITAL VIDEO EDITING</td>
<td></td>
</tr>
<tr>
<td>GRD 102</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO ILLUSTRATOR</td>
<td></td>
</tr>
<tr>
<td>GRD 103</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO PHOTOSHOP</td>
<td></td>
</tr>
<tr>
<td>GRD 110</td>
<td>3</td>
</tr>
<tr>
<td>PRINCIPLES OF DESIGN</td>
<td></td>
</tr>
<tr>
<td>GRD 120</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO GRAPHIC DESIGN</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 62**
# Web Design Certificate

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 220</td>
<td>E-BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 120A</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 153A</td>
<td>DATABASE MANAGEMENT-ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 199</td>
<td>INTERNET CONTENT MANAGEMENT SYSTEMS-CMS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 228</td>
<td>JAVASCRIPT</td>
<td>3</td>
</tr>
<tr>
<td>CIS 257A</td>
<td>HTML FOR INTERNET WEB PAGE DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>CIS 258</td>
<td>ADVANCED HTML</td>
<td>3</td>
</tr>
<tr>
<td>CIS 267PHP</td>
<td>SERVER-SIDE WEB PROGRAMMING USING PHP</td>
<td>3</td>
</tr>
<tr>
<td>GRD 102</td>
<td>INTRODUCTION TO ILLUSTRATOR</td>
<td>3</td>
</tr>
<tr>
<td>GRD 110</td>
<td>PRINCIPLES OF DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>GRD 120</td>
<td>INTRODUCTION TO GRAPHIC DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVE</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL 30**
**Associate in Applied Science**  
**Web Game Development Entrepreneur**

This degree program provides students with the foundation skills to own and operate a web-based game development business. Students acquire the skills to create web-based entertainment offerings, to effectively utilize programming and game scripting skills, to design and normalize databases, to implement server-side scripts, to employ graphic design in the creation of the user interface, and to apply principles of game development. Students learn how to utilize market analysis techniques to understand the various trends in the marketplace in order to create a successful offering. In addition, they learn how to run the day-to-day operation of the business by employing database management procedures, using accounting procedures, professional business communication, analyzing profit and loss statements, applying business ethics, and creating and executing a business plan.

### General Education Requirements  
18 CR. HRS.

<table>
<thead>
<tr>
<th>Course</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 English Composition</td>
<td></td>
</tr>
<tr>
<td>BCOM 102 Advanced Bus and Tech Communications</td>
<td></td>
</tr>
<tr>
<td>CIS 120A Intro to Computer Information Systems</td>
<td></td>
</tr>
<tr>
<td>PHIL 205 Business Ethics</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
</tr>
<tr>
<td>MATH 115A Probability and Statistics or Higher Level Math Course</td>
<td></td>
</tr>
<tr>
<td>BUS 127 Human Relations</td>
<td></td>
</tr>
<tr>
<td>COM 101 Oral Communications</td>
<td></td>
</tr>
</tbody>
</table>

### Entrepreneur Core Requirements  
12 CR. HRS.

<table>
<thead>
<tr>
<th>Course</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 131 Introduction to Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>BUS 167 Professionalism</td>
<td></td>
</tr>
<tr>
<td>BUS 223 Starting Your Business Plan</td>
<td></td>
</tr>
<tr>
<td>BUS 240 Entrepreneurship Capstone</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
</tr>
<tr>
<td>BUS 161A Effective Selling</td>
<td></td>
</tr>
<tr>
<td>BUS 204 E-Marketing</td>
<td></td>
</tr>
<tr>
<td>BUS 220 E-Business</td>
<td></td>
</tr>
</tbody>
</table>

### Degree Requirements  
32 CR. HRS.

<table>
<thead>
<tr>
<th>Course</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 108 Introduction to Project Management</td>
<td></td>
</tr>
<tr>
<td>CIS 124 Introduction to Game Development</td>
<td></td>
</tr>
<tr>
<td>CIS 153A Database Management-Access</td>
<td></td>
</tr>
<tr>
<td>CIS 185 C Programming</td>
<td></td>
</tr>
<tr>
<td>CIS 244 Game Scripting</td>
<td></td>
</tr>
<tr>
<td>CIS 253A Database Design and Implementation</td>
<td></td>
</tr>
<tr>
<td>CIS 257A HTML for Internet Web Page Design</td>
<td></td>
</tr>
<tr>
<td>CIS 267PHP Server-Side Web Programming Using PHP</td>
<td></td>
</tr>
<tr>
<td>BUS 167 Professionalism</td>
<td></td>
</tr>
<tr>
<td>BUS 290CI Cooperative Internship Program</td>
<td></td>
</tr>
<tr>
<td>TH 102 Intro to Acting</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
</tr>
<tr>
<td>ART 198 Art History</td>
<td></td>
</tr>
<tr>
<td>BUS 161A Effective Selling</td>
<td></td>
</tr>
<tr>
<td>BUS 204 E-Marketing</td>
<td></td>
</tr>
<tr>
<td>BUS 220 E-Business</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
</tr>
<tr>
<td>BUS 161A Effective Selling</td>
<td></td>
</tr>
<tr>
<td>BUS 204 E-Marketing</td>
<td></td>
</tr>
<tr>
<td>BUS 220 E-Business</td>
<td></td>
</tr>
</tbody>
</table>

Total 62
Associate in Applied Science
Website Development Entrepreneur

This program provides students with foundational skills required to own and operate a Website development business. This includes understanding the features and opportunities of doing business on the Internet and by examining how e-business strategies differ from those of traditional businesses. Students will employ professional design principles in the development of effective and user-friendly websites using XHTML and cascading style sheets. Students acquire the skills required to write error-free computer programs and server-side scripts, to design and normalize databases, as well as create and integrate multi-media applications using sound, video and animation. The degree is wrapped around learning fundamental day-to-day business skills including implementing a business plan, client management, professional business communication, accounting and finance functions. Students completing this program understand the challenges involved with establishing a new business, keeping it financially sound and solving issues faced by new businesses.

**GENERAL EDUCATION REQUIREMENTS**  
20 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 102</td>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 120A</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 205</td>
<td>BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BUS 126</td>
<td>BUSINESS MATH</td>
<td></td>
</tr>
<tr>
<td>MATH 115A</td>
<td>PROBABILITY AND STATISTICS</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BUS 127</td>
<td>HUMAN RELATIONS</td>
<td></td>
</tr>
<tr>
<td>COM 101</td>
<td>ORAL COMMUNICATIONS</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>HE 110</td>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td></td>
</tr>
<tr>
<td>PEA/DNC</td>
<td>ANY PHYSICAL EDUCATION OR DANCE COURSE</td>
<td></td>
</tr>
</tbody>
</table>

**ENTREPRENEUR CORE REQUIREMENTS**  
12 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 131</td>
<td>INTRODUCTION TO ENTREPRENEURSHIP</td>
<td>1</td>
</tr>
<tr>
<td>BUS 167</td>
<td>PROFESSIONALISM IN YOUR CAREER</td>
<td>1</td>
</tr>
<tr>
<td>BUS 220</td>
<td>E-BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>BUS 223</td>
<td>STARTING YOUR BUSINESS PLAN</td>
<td>4</td>
</tr>
<tr>
<td>BUS 240</td>
<td>ENTREPRENEURSHIP CAPSTONE</td>
<td>3</td>
</tr>
</tbody>
</table>

**DEGREE REQUIREMENTS**  
30 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 153A</td>
<td>DATABASE MANAGEMENT-ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 185</td>
<td>C PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>CIS 199</td>
<td>INTERNET CONTENT MANAGEMENT SYSTEMS-CMS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 228</td>
<td>JAVASCRIPT</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BUS 131</td>
<td>INTRODUCTION TO ENTREPRENEURSHIP</td>
<td></td>
</tr>
<tr>
<td>BUS 167</td>
<td>PROFESSIONALISM IN YOUR CAREER</td>
<td></td>
</tr>
<tr>
<td>BUS 220</td>
<td>E-BUSINESS</td>
<td></td>
</tr>
<tr>
<td>BUS 223</td>
<td>STARTING YOUR BUSINESS PLAN</td>
<td></td>
</tr>
<tr>
<td>BUS 240</td>
<td>ENTREPRENEURSHIP CAPSTONE</td>
<td></td>
</tr>
<tr>
<td>CIS 253A</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>CIS 257A</td>
<td>HTML FOR INTERNET WEB PAGE DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>CIS 258</td>
<td>ADVANCED HTML WEB DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>CIS 280</td>
<td>JAVA PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>CIS 267PHP</td>
<td>SERVER-SIDE WEB PROGRAMMING USING PHP</td>
<td>3</td>
</tr>
<tr>
<td>GRD 120</td>
<td>INTRODUCTION TO GRAPHIC DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>BUS 204</td>
<td>eMARKETING</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 62**

2023 - 2024 Muskegon Community College Catalog - 121
Associate in Applied Science
Graphic Design

The graphic design curriculum is a career-focused program designed to help students combine creativity with technology to create effective and memorable visual messaging. Students develop skills in understanding the principles of graphic design, ideation, and mastery of production techniques through specific software classes for print and web. Students work independently and in groups formulating, executing, and presenting concepts in a variety of formats. This program is appropriate for students who wish to enhance their skills, or retrain for new or added job skills to enter the job market. The curriculum combines foundational concepts with hands-on projects, culminating in the assembly of a professional portfolio. Graduates may find work with design firms, advertising agencies, publishing and printing firms, media companies, or businesses with in-house design departments.

GENERAL EDUCATION REQUIREMENTS 15 CR. HRS.
ENG 101 ................................................................. 3
ENGLISH COMPOSITION
BCOM 102 ............................................................. 3
ADVANCED BUS AND TECH COMMUNICATIONS
BUS 127 ............................................................... 3
HUMAN RELATIONS
SOC 101 ............................................................... 3
PRINCIPLES OF SOCIOLOGY
TMAT 101A .......................................................... 3
TECHNICAL MATH I

GRAPHIC DESIGN REQUIREMENTS 30 CR. HRS.
GRD 101 ................................................................. 3
INTRODUCTION TO INDESIGN
GRD 102 ................................................................. 3
INTRODUCTION TO ILLUSTRATOR
GRD 103 ................................................................. 3
INTRODUCTION TO PHOTOSHOP
GRD 110 ................................................................. 3
PRINCIPLES OF DESIGN
GRD 120 ................................................................. 3
INTRODUCTION TO GRAPHIC DESIGN
GRD 140 ................................................................. 3
INTRODUCTION TO TYPOGRAPHY
GRD 160 ................................................................. 3
HISTORY OF GRAPHIC DESIGN
GRD 210 ................................................................. 3
GRAPHIC DESIGN II
GRD 280 ................................................................. 3
PORTFOLIO PREPARATION
Choose One (1) Course From: ................................. 3
GRD 290CI5  GRAPHIC DESIGN INTERNSHIP
GRD 292  GRAPHIC DESIGN STUDIO M

RELATED REQUIREMENTS 15 CR. HRS.
ART 104 ................................................................. 3
DRAWING I
ART 199 ................................................................. 3
ART HISTORY II
BUS 260 ............................................................... 3
PRINCIPLES OF MARKETING
CIS 120A .............................................................. 3
INTRODUCTION TO COMPUTER INFO SYSTEMS
CIS 257A .............................................................. 3
HTML FOR INTERNET WEB PAGÉ DESIGN

RECOMMENDED ELECTIVES 2-3 CR. HRS.
(Take 2-3 credits of any of the following courses)
ART 100A ............................................................... 3
ART APPRECIATION
ART 105B ................................................................ 3
TWO-DIMENSIONAL FORM AND SURFACE
BUS 131 ............................................................... 1
INTRO TO ENTREPRENEURSHIP
BUS 167 ............................................................... 1
PROFESSIONALISM IN YOUR CAREER
BUS 220 ............................................................... 3
E-BUSINESS
BUS 263 ............................................................... 3
ADVERTISING DYNAMICS
CIS 119PP ............................................................ 1
INTRODUCTION TO PRESENTATION GRAPHICS
CIS 199 ............................................................... 1
INTERNET CONTENT MANAGEMENT SYSTEMS-CMS

TOTAL 62

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.
**Associate in Applied Science**

**Graphic Design Entrepreneur**

Students completing this set of classes will have the foundation skills to run a freelance graphic design business. The skill set includes competency in creating graphic design solutions for either print or web-based advertising. Students will develop proficiencies in contemporary graphic design software, image creation and integrating animation techniques in final design solutions. They apply fundamental design elements and principles using type, image and layout to create professional quality display advertising.

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS</th>
<th>18 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH</td>
<td></td>
</tr>
<tr>
<td>BCOM 102</td>
<td>3</td>
</tr>
<tr>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td></td>
</tr>
<tr>
<td>BUS 126</td>
<td>3</td>
</tr>
<tr>
<td>BUSINESS MATH</td>
<td></td>
</tr>
<tr>
<td>CIS 120A</td>
<td>3</td>
</tr>
<tr>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>PHIL 205</td>
<td>3</td>
</tr>
<tr>
<td>BUSINESS ETHICS</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3</td>
</tr>
<tr>
<td>BUS 127</td>
<td>HUMAN RELATIONS</td>
</tr>
<tr>
<td>COM 101</td>
<td>ORAL COMMUNICATIONS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENTREPRENEUR CORE REQUIREMENTS</th>
<th>12 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 131</td>
<td>1</td>
</tr>
<tr>
<td>INTRODUCTION TO ENTREPRENEURSHIP</td>
<td></td>
</tr>
<tr>
<td>BUS 167</td>
<td>1</td>
</tr>
<tr>
<td>PROFESSIONALISM</td>
<td></td>
</tr>
<tr>
<td>BUS 223</td>
<td>4</td>
</tr>
<tr>
<td>STARTING YOUR BUSINESS PLAN</td>
<td></td>
</tr>
<tr>
<td>BUS 240</td>
<td>3</td>
</tr>
<tr>
<td>ENTREPRENEURSHIP CAPSTONE</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3</td>
</tr>
<tr>
<td>BUS 161A</td>
<td>EFFECTIVE SELLING</td>
</tr>
<tr>
<td>BUS 220</td>
<td>E-BUSINESS</td>
</tr>
<tr>
<td>BUS 204</td>
<td>E-MARKETING</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DEGREE REQUIREMENTS</th>
<th>32 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 263</td>
<td>3</td>
</tr>
<tr>
<td>ADVERTISING DYNAMICS</td>
<td></td>
</tr>
<tr>
<td>CIS 257A</td>
<td>3</td>
</tr>
<tr>
<td>HTML FOR INTERNET WEB PAGE DESIGN</td>
<td></td>
</tr>
<tr>
<td>GRD 101</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO INDESIGN</td>
<td></td>
</tr>
<tr>
<td>GRD 102</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO ILLUSTRATOR</td>
<td></td>
</tr>
<tr>
<td>GRD 103</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO PHOTOSHOP</td>
<td></td>
</tr>
<tr>
<td>GRD 110</td>
<td>3</td>
</tr>
<tr>
<td>PRINCIPLES OF DESIGN</td>
<td></td>
</tr>
<tr>
<td>GRD 120</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO GRAPHIC DESIGN</td>
<td></td>
</tr>
<tr>
<td>GRD 140</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO TYPOGRAPHY</td>
<td></td>
</tr>
<tr>
<td>GRD 210</td>
<td>3</td>
</tr>
<tr>
<td>GRAPHIC DESIGN II</td>
<td></td>
</tr>
<tr>
<td>GRD 280</td>
<td>3</td>
</tr>
<tr>
<td>PORTFOLIO PREPARATION</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>2-3</td>
</tr>
<tr>
<td>GRD 290CI</td>
<td>GRAPHIC DESIGN INTERNSHIP</td>
</tr>
<tr>
<td>GRD 292</td>
<td>GRAPHIC DESIGN STUDIO M</td>
</tr>
</tbody>
</table>

TOTAL 62-63
## Graphic Design Video/Audio Certificate

The curriculum is designed to provide students with a broad multi-media skillset. Students will combine traditional graphic design and typography principles through application projects, with exposure to technical skills gained in computer, video, and audio development and production. This program provides students with pertinent knowledge to enter the communications field.

Transfer paths and requirements: This program is not designed for students wishing to transfer to a four-year college for a bachelor’s degree. Students planning to transfer should consult with an MCC counselor. This is intended to go directly into the workforce.

### CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 123</td>
<td>BUSINESS LAW</td>
<td>3</td>
</tr>
<tr>
<td>CIS 287A</td>
<td>DIGITAL VIDEO EDITING</td>
<td>3</td>
</tr>
<tr>
<td>COM 102</td>
<td>MASS MEDIA</td>
<td>3</td>
</tr>
<tr>
<td>COM 112</td>
<td>AUDIO PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>COM 212</td>
<td>TELEVISION PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>GRD 110</td>
<td>PRINCIPLES OF DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>GRD 120</td>
<td>INTRODUCTION TO GRAPHIC DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>GRD 140</td>
<td>INTRODUCTION TO TYPOGRAPHY</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose One (1) Course From:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 110</td>
<td>COMPUTER CONCEPTS</td>
</tr>
<tr>
<td>CIS 120A</td>
<td>INTRO TO COMPUTERS INFORMATION SYSTEMS</td>
</tr>
</tbody>
</table>

**TOTAL 26**
Digital Music/Audio Production Certificate

The Digital Music and Audio Production certificate will provide students with a deep understanding of audio equipment, system design, and software as well as a basic understanding of music. Practical experience will enable the student to evaluate the needs of musicians in a recording session or live audio situation, choose the best equipment for the circumstances, and in the end, deliver a professional quality recording or live audio experience. Students will study music theory, keyboard performance, and perform with an ensemble to develop their own skills and to be able to speak confidently with musicians in session to help improve the final result. Working with other students in their cohort, they will also learn to collaborate when setting up a recording or live audio session and gain insights from other students’ experience.

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMU 101 - AUDIO RECORDING I</td>
<td>3</td>
</tr>
<tr>
<td>DMU 102 - AUDIO RECORDING II</td>
<td>3</td>
</tr>
<tr>
<td>DMU 103 - AUDIO RECORDING III</td>
<td>3</td>
</tr>
<tr>
<td>DMU 104 - LIVE AUDIO PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>DMU 110 - INTRO TO MIDI INSTRUMENTS</td>
<td>3</td>
</tr>
<tr>
<td>DMU 201 - DIGITAL MUSIC &amp; AUDIO CAPSTONE PROJECT</td>
<td>3</td>
</tr>
<tr>
<td>MU 100 - INTRODUCTION TO MUSIC THEORY</td>
<td>3</td>
</tr>
<tr>
<td>MU 190C - CLASS PIANO (BASIC PIANO)</td>
<td>1</td>
</tr>
<tr>
<td>MU 191C - CLASS PIANO</td>
<td>1</td>
</tr>
<tr>
<td>MU 240 - PROFESSIONAL PRACTICES IN MUSIC</td>
<td>3</td>
</tr>
<tr>
<td>Choose Two (2) Course From:</td>
<td>2</td>
</tr>
<tr>
<td>MU 104CS - COLLEGE SINGERS</td>
<td></td>
</tr>
<tr>
<td>MU 105CS - COLLEGE SINGERS</td>
<td></td>
</tr>
<tr>
<td>MU 110 (A-F) - JAYHAWK SOUND</td>
<td></td>
</tr>
<tr>
<td>MU 111 (A-F) - WIND ENSEMBLE</td>
<td></td>
</tr>
<tr>
<td>MU 117 (A-F) - JAZZ ENSEMBLE</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 28**
Associate in Applied Science
Music Performance Entrepreneur

This degree program provides the foundation skills for the performance musician to operate, promote, manage, and stage a musical act in the professional music world. Everyone seeking this degree makes music and participates in ensembles of their own choosing. Students have the option of specializing in one instrument or broadening their instrumental repertoire through the study of multiple instruments. To put their own music performances into proper perspective, students are asked to explore music literature and music theory. They also gain hands-on experience with the technology and software professionals use for business communication, accounting and finance functions associated with money making enterprises. People completing this degree are exposed to music career options and common business practices, along with the challenges and joys of being a musical artist.

GENERAL EDUCATION REQUIREMENTS 20 CR. HRS.
ENG 101 .......................... 3
ENGLISH COMPOSITION
BCOM 102 ....................... 3
ADVANCED BUS AND TECH COMMUNICATIONS
CIS 120A...................... 3
INTRO TO COMPUTER INFORMATION SYSTEMS
PHIL 205................. 3
BUSINESS ETHICS
Choose One (1) Course From: ......................... 3
BUS 126  BUSINESS MATH
MATH 115A  PROBABILITY AND STATISTICS
Choose One (1) Course From: ......................... 3
BUS 127  HUMAN RELATIONS
COM 101  ORAL COMMUNICATIONS
Choose One (1) Course From: ......................... 1
HE 110  INDUSTRIAL SAFETY AND WORKPLACE TRAINING
PEA/DNC Any physical education or dance course
Choose One (1) Course From: ......................... 1
PEA 101A, PEA 103, PEA 104A, PEA 118, or PEA 201

ENTREPRENEUR CORE REQUIREMENTS 12 CR. HRS.
BUS 131 .......................................... 1
INTRODUCTION TO ENTREPRENEURSHIP
BUS 167 .......................................... 1
PROFESSIONALISM
BUS 223 ....................................... 4
STARTING YOUR BUSINESS PLAN
BUS 240 ....................................... 3
ENTREPRENEURSHIP CAPSTONE
Choose One (1) Course From: ......................... 3
BUS 161A  EFFECTIVE SELLING
BUS 220  E-BUSINESS
BUS 204  eMARKETING

DEGREE REQUIREMENTS 30 CR. HRS.
MU 101 .............................................. 3
MUSIC THEORY
MU 103A ........................................... 3
MUSIC APPRECIATION
MU 194 .............................................. 1
SIGHT-READING AND EAR TRAINING
MU 240 ............................................. 3
PROFESSIONAL PRACTICES IN MUSIC
Performance/Ensemble ................................ 4
Any MU Performance/Ensemble Courses
Choose One (1) Course From: ......................... 3
MU 100  INTRODUCTION TO MUSIC THEORY
**MU 102  MUSIC THEORY
Choose One (1) Course From: ......................... 3
MU 190A  CLASS PIANO FOR MUSIC MAJORS
MU 190B  CLASS PIANO (NON-MUSIC MAJORS)

APPLIED MUSIC OPTIONS
Choose One (1) of the following options: ............. 8

OPTION 1
Any Two-Course Sequence with a Primary Instrument from MU 148PVT to MU 189PVT and Any Two-Course Sequence with an Advanced Instrument from MU 248 to MU 289

OPTION 2
Any Two-Course Sequence with a Primary Instrument from MU 148PVT to MU 189PVT and Any 4 Courses with a Secondary Instrument from MU 127 to MU 147

OPTION 3
Any Eight Courses with a Secondary Instrument from MU 127 to MU 147

ELECTIVES
Any MU Course Not Taken Above 3 CR. HRS.

TOTAL 62

** If taking MU 102, choose MU 191A and MU 195 as MU electives.
Associate in Applied Science
Visual Art Entrepreneur

This degree program provides Visual Art students with the basic skills for a variety of entrepreneurial avenues such as self-employed artist, art promoter, gallery representative, or commercial art gallery owner/director. Along with acquiring practical business concepts, the student also develops basic hands-on skills through a variety of two and three-dimensional studio experiences traditionally associated with foundation-level undergraduate art degrees. Study in art from historical and contemporary viewpoints to help gain insights into the cultural significance of art and the interrelationship of art and society is also stressed. The student then concludes the degree with an overview of professional practices in art and further hands-on experience in gallery/museum operations. Students completing this program are made aware of many of the challenges they will face when starting and operating a business.

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS</th>
<th>20 CR. HRS.</th>
<th>DEGREE REQUIREMENTS</th>
<th>30 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td></td>
<td>ART 104</td>
<td></td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td>3</td>
<td>ART 105B</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 102</td>
<td></td>
<td>TWO-DIMENSIONAL FORM AND SURFACE</td>
<td></td>
</tr>
<tr>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td>3</td>
<td>ART 198</td>
<td>3</td>
</tr>
<tr>
<td>BUS 126</td>
<td></td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>BUSINESS MATH</td>
<td>3</td>
<td>ART 199</td>
<td>3</td>
</tr>
<tr>
<td>CIS 120A</td>
<td></td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>1</td>
<td>ART 202</td>
<td>3</td>
</tr>
<tr>
<td>HE 110</td>
<td>1</td>
<td>CONTEMPORARY ART HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>BUSINESS ETHICS</td>
<td>3</td>
<td>ART 204B</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3</td>
<td>DRAWING II-TRANSFER PORTFOLIO PREPARATION</td>
<td>3</td>
</tr>
<tr>
<td>BUS 127 HUMAN RELATIONS</td>
<td>3</td>
<td>PROFESSIONAL PRACTICES IN ART</td>
<td>3</td>
</tr>
<tr>
<td>COM 101 ORAL COMMUNICATIONS</td>
<td></td>
<td>ART 240</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>1</td>
<td>GALLERY/COLLECTION PRACTICUM</td>
<td>3</td>
</tr>
<tr>
<td>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</td>
<td></td>
<td>ART 290CI</td>
<td>3</td>
</tr>
<tr>
<td>ENTRPRENEUR CORE REQUIREMENTS</td>
<td>12 CR. HRS.</td>
<td>ART COOPERATIVE INTERNSHIP</td>
<td>3</td>
</tr>
<tr>
<td>BUS 131</td>
<td>1</td>
<td>Choose One (1) Course From:</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO ENTREPRENEURSHIP</td>
<td></td>
<td>ART 108, ART 109, ART 117</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3</td>
<td>CERAMICS I, SCULPTURE I, THREE-DIMENSIONAL FORM AND SPACE</td>
<td></td>
</tr>
<tr>
<td>BUS 161A EFFECTIVE SELLING</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 220 E-BUSINESS</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 204 eMARKETING</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 167 PROFESSIONALISM</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 223 STARTING YOUR BUSINESS PLAN</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 240 ENTREPRENEURSHIP CAPSTONE</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL 62
# Corrections Certificate

The MCC Criminal Justice Corrections Certificate is designed to include the five classes that are recommended by the Michigan Correctional Training Council. These classes can be taken to qualify for employment with the Michigan Department of Corrections. Each of these classes must be completed with a grade of “C” (2.0 GPA) or better.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 101</td>
<td>INTRODUCTION TO LAW ENFORCEMENT</td>
<td>3</td>
</tr>
<tr>
<td>CJ 250</td>
<td>INTRODUCTION TO CORRECTIONS</td>
<td>3</td>
</tr>
<tr>
<td>CJ 251A</td>
<td>LEGAL ISSUES IN CORRECTIONS</td>
<td>3</td>
</tr>
<tr>
<td>CJ 252A</td>
<td>CORRECTIONAL INSTITUTIONS/FACILITIES</td>
<td>3</td>
</tr>
<tr>
<td>CJ 257</td>
<td>CLIENT RELATIONS IN CORRECTIONS</td>
<td>3</td>
</tr>
<tr>
<td>CJ 258A</td>
<td>CLIENT GROWTH AND DEVELOPMENT</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 18**
## Associate in Applied Science
### Criminal Justice/Corrections

#### General Education Requirements (20-22 CR. HRS.)
- **ENG 101** English Composition ................................................. 3
- **BCOM 102** Advanced Bus & Tech Communications ................. 3

Choose One (1) Course From:
- **BUS 126** Business Math .................................................. 3
- **MATH 109A** College Algebra ............................................. 3
- **MATH 115A** Probability and Statistics ................................. 3

Choose One (1) Course From:
- **COM 101** Oral Communications ....................................... 3
- **GEOG 104** Cultural Geography ......................................... 3
- **PHIL 205** Business Ethics ................................................. 3
- **PSCI 111** Intro to American Government .......................... 3
- **PSCI 211** Comparative Governments ................................ 3
- **PSYC 102** Applied Psychology ......................................... 3
- **PSYC 201** General Psychology ......................................... 3

Choose One (1) Course From:
- **CIS 110** Computer Concepts ........................................... 3
- **CIS 120A** Intro to Computer Information Systems ............ 3

**PEA/DNC** .............................................................................. 2

**Total** ..................................................................................

#### Criminal Justice Requirements (15 CR. HRS.)
- **CJ 101** Intro to Law Enforcement ....................................... 3
- **CJ 102** Police Administration I .......................................... 3
- **CJ 104** Police Administration II ......................................... 3
- **CJ 109** Criminology ......................................................... 3
- **CJ 201** Crime Prevention and Juvenile Delinquency ............ 3

#### Corrections Requirements (15 CR. HRS.)
- **CJ 250** Introduction to Corrections ..................................... 3
- **CJ 251A** Legal Issues in Corrections ................................... 3
- **CJ 252A** Correctional Institutions/Facilities .......................... 3
- **CJ 257** Client Relations in Corrections ................................. 3
- **CJ 258A** Client Growth and Development ........................... 3

#### Recommended Electives (10-12 CR. HRS.)
- **CJ 110** Defensive Tactics .................................................. 3
- **CJ 130** Tactital Communication ......................................... 3
- **CJ 202** Police Administration II ......................................... 3
- **CJ 204** Criminal Investigations .......................................... 3
- **CJ 205** Interrogation and Case Preparation ........................ 3
- **CJ 206** Evidence and Criminal Procedure ........................ 3
- **CJ 207** Police and Community Relations ............................ 3
- **CJ 208** Police Science Laboratory I ................................... 3

**Total** ..................................................................................

*All CJ classes must be passed with a minimum grade of “C.”*
## Associate in Applied Science

### Criminal Justice/Law Enforcement

#### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 102</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Bus &amp; Tech Communications</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3-4</td>
</tr>
<tr>
<td>BUS 126</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109A</td>
<td>3</td>
</tr>
<tr>
<td>MATH 115A</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
</tr>
<tr>
<td>GEOG 104</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 205</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 111</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 211</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 102</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 201</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td></td>
</tr>
<tr>
<td>CIS 110</td>
<td>3</td>
</tr>
<tr>
<td>CIS 120A</td>
<td>3</td>
</tr>
<tr>
<td>PEA/DNC</td>
<td>2</td>
</tr>
<tr>
<td>ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PE 118, OR PEA 201 AND ONE PEA/DNC CREDIT OF CHOICE</td>
<td></td>
</tr>
</tbody>
</table>

#### Criminal Justice Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 101</td>
<td>3</td>
</tr>
<tr>
<td>Police Administration I</td>
<td>3</td>
</tr>
<tr>
<td>CJ 102</td>
<td>3</td>
</tr>
<tr>
<td>CJ 104</td>
<td>3</td>
</tr>
<tr>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CJ 109</td>
<td>3</td>
</tr>
<tr>
<td>Crime Prevention and Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CJ 201</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Legal Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 202</td>
<td>3</td>
</tr>
<tr>
<td>Police Administration II</td>
<td></td>
</tr>
<tr>
<td>CJ 204</td>
<td>3</td>
</tr>
<tr>
<td>Criminal Investigations</td>
<td>3</td>
</tr>
<tr>
<td>CJ 205</td>
<td>3</td>
</tr>
<tr>
<td>Interrogation and Case Preparation</td>
<td>3</td>
</tr>
<tr>
<td>CJ 206</td>
<td>3</td>
</tr>
<tr>
<td>Evidence and Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CJ 207</td>
<td>3</td>
</tr>
<tr>
<td>Police and Community Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Recommended Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 110</td>
<td>3</td>
</tr>
<tr>
<td>Defensive Tactics</td>
<td>3</td>
</tr>
<tr>
<td>CJ 130</td>
<td>3</td>
</tr>
<tr>
<td>Tactical Communication</td>
<td>3</td>
</tr>
<tr>
<td>CJ 208</td>
<td>3</td>
</tr>
<tr>
<td>Police Science Laboratory I</td>
<td>3</td>
</tr>
<tr>
<td>CJ 250</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJ 251A</td>
<td>3</td>
</tr>
<tr>
<td>Legal Issues in Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJ 252A</td>
<td>3</td>
</tr>
<tr>
<td>Correctional Institutions/Facilities</td>
<td>3</td>
</tr>
<tr>
<td>CJ 257</td>
<td>3</td>
</tr>
<tr>
<td>Client Relations in Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJ 258A</td>
<td>3</td>
</tr>
<tr>
<td>Client Growth and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total: 62**

All CJ classes must be passed with a minimum grade of "C."
Business Technology Programs
(Degrees and Certificates)

AAS Degree Programs
- Administrative/Office Management
- Administrative/Office Management-Medical

Certificates
- Administrative Medical Assistant
- Office Assistant
Associate in Applied Science

Administrative/Office Management

This program is for the AAS degree student and is not designed for the student wishing to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor. This program will provide training in office skills and administration in order for the student to attain a high degree of competency and meet entry-level qualifications for an administrative office assistant position. This degree will also prepare the student to supervise and manage a small to mid-size office. Upon completion of the program, the student will be able to use hardware and software commonly used in the office; successfully communicate through effective writing and speech; demonstrate the ability to keyboard at a speed that meets industry standards; create business documents following standards; effectively supervise, organize, and lead employees in the office environment; and demonstrate critical thinking skills as they relate to the administrative/office manager.

GENERAL EDUCATION REQUIREMENTS 18 CR. HRS.
ENG 101 ................................................................. 3
ENGLISH COMPOSITION
BCOM 102 .............................................................. 3
ADVANCED BUS AND TECH COMMUNICATIONS
BUS 126 ................................................................. 3
BUSINESS MATH
Choose One (1) Course From:
BUS 127 HUMAN RELATIONS
COM 101 ORAL COMMUNICATIONS
CIS 120A ................................................................. 3
INTRODUCTION TO COMPUTER INFORMATION SYSTEMS
PHIL 205 ................................................................. 3
BUSINESS ETHICS

TOTAL 18

BUSINESS/CSE CORE REQUIREMENTS 9 CR. HRS.
ACC 100 ................................................................. 3
FUNDAMENTALS IN ACCOUNTING
BUS 121 ................................................................. 3
INTRODUCTION TO BUSINESS
BUS 180D .............................................................. 3
WORD PROCESSING PART 1

TOTAL 9

ADMINISTRATIVE ASSISTANT/SPECIALIST CORE REQUIREMENTS 29-30 CR. HRS.
ACC 206 ................................................................. 3
QUICKBOOKS COMPUTERIZED ACCOUNTING
BUS 123 ................................................................. 3
BUSINESS LAW
BUS 125 ................................................................. 3
SUPERVISION
BUS 167 ................................................................. 1
PROFESSIONALISM IN YOUR CAREER
BUS 179 ................................................................. 1
KEYBOARDING
BUS 181C ................................................................. 3
OFFICE PROCEDURES 1: DOCUMENT FORMATTING
BUS 182C ................................................................. 3
OFFICE PROCEDURES 1: DOCUMENT PRODUCTION
BUS 280C ................................................................. 3
WORD PROCESSING II
BUS 290CI ............................................................ 2-3
COOPERATIVE INTERNSHIP PROGRAM
CIS 101EW ........................................................... 1
INTRODUCTION TO ELECTROIC SPREADSHEETS
CIS 102EW ........................................................... 1
INTERMEDIATE ELECTROIC SPREADSHEETS
CIS 106 ................................................................. 3
GOOGLE APPS
CIS 119PP ............................................................. 1
INTRODUCTION TO PRESENTATION GRAPHICS
CIS 153AW ........................................................... 1
DATABASE MANAGEMENT - ACCESS

TOTAL 29-30

RECOMMENDED ELECTIVES (DEPENDENT ON INDIVIDUAL STUDENT TO MEET 62 CREDIT HOUR MINIMUM)
BUS 123 ................................................................. 3
BUSINESS LAW I
BUS 166 ................................................................. 3
QUALITY CUSTOMER SERVICE
BUS 200 ................................................................. 3
INTERNATIONAL BUSINESS
BUS 220 ................................................................. 3
E-BUSINESS
ECN 101A .............................................................. 4
PRINCIPLES OF MACROECONOMICS

TOTAL 62

132 - 2023 - 2024 Muskegon Community College Catalog
Associate in Applied Science
Administrative/Office Management Medical

This program is for the AAS degree student and is not designed for the student planning to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor. This program will provide training in medical office activities/procedures in order for the student to attain a high degree of competency and meet entry-level qualifications for an administrative office with specialized medical office skills. This includes the ability to manage administrative support staff of a small medical practice. Upon completion of the program, the student will be able to successfully communicate through effective writing and speech; recognize the importance of safeguarding confidentiality as it relates to the medical/legal, professional and bio-ethical standards and laws; define and use terms related to the administrative medical office; operate computer systems/software or other types of technology to accomplish office tasks; effectively supervise, organize, and lead employees in a medical office environment; and demonstrate problem solving skills as related to the management of employees.

GENERAL EDUCATION REQUIREMENTS

ENG 101 English Composition .........................................................3
ENGLISH COMPOSITION
BCOM 102 Advanced Bus and Tech Communications ..................3
ADVANCED BUS AND TECH COMMUNICATIONS
BUS 126 Business Math ..............................................................3
BUSINESS MATH
Choose One (1) Course From: .....................................................3
BUS 127 Human Relations
COM 101 Oral Communications
CIS 120A Introduction to Computer Information Systems ............3
INTRODUCTION TO COMPUTER INFORMATION SYSTEMS
Choose One (1) Course From: .....................................................3
PHIL 204 Biomedical Ethics
PHIL 205 Business Ethics
PSYC 102 Applied Psychology

TOTAL 18

BUSINESS/TECHNOLOGY CORE REQUIREMENTS

ACC 100 Fundamentals in Accounting ...........................................3
FUNDAMENTALS IN ACCOUNTING
BUS 121 Introduction to Business .................................................3
INTRODUCTION TO BUSINESS
BUS 180D Word Processing Part 1 .................................................3

TOTAL 9

MEDICAL/ADMINISTRATIVE DEGREE CORE REQUIREMENTS

35 CR. HRS.

ACC 206 Quickbooks Computerized Accounting .........................3
QUICKBOOKS COMPUTERIZED ACCOUNTING
AH 101 Medical Terminology ......................................................3
AH 104 Medical Billing ..............................................................2
AH 196 Electronic Health Records ..............................................3
MA 101 Medical Assistant Administrative I ...................................2
MA 105 Medical Assistant Administrative II ...............................2

TOTAL 35

RECOMMENDED ELECTIVES (IF BUS 179 Keyboarding is Waived)

BUS 290C .................................................................2
COOPERATIVE INTERNSHIP PROGRAM
CIS 102EW ..............................................................1
INTERMEDIATE ELECTRONIC SPREADSHEETS
CIS 119PP ..............................................................1
INTRODUCTION TO PRESENTATION GRAPHICS
CIS 153 .................................................................1
DATABASE MANAGEMENT-ACCESS

TOTAL 62
Administrative Medical Assistant Certificate

The following certificate is designed to provide training to meet entry level positions in a medical office administrative position. Job titles include medical receptionist, registration clerk, scheduling clerk, business office coordinator, and patient access representative. Upon completion of the program, the student will be able to successfully recognize the importance of safeguarding confidentiality as it relates to medical/legal, professional and bio-ethical standards and laws, define and use terms related to the administrative medical office; and operate basic computer systems/software.

Medical Administrative Assistants manage the front desk and office side of the medical practice. Job duties may include checking patients in and out at the front desk, answering the telephone, scheduling patients for appointments, compiling medical records and charts, using computer software, and maintaining supplies for the office.

This certificate is not designed for the student planning to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor.

This certificate flows directly into the Administrative/Office Management - Medical, AAS degree. Students are eligible to sit for the Certified Medical Administrative Assistant (CMAA) exam through the National Healthcareer Association upon completion of the program.

*Students wishing to continue on to receive a Medical Assistant Certificate, or switch to the Medical Assistant Certificate after taking MA101 and MA105, will have to retest their skills for those two courses and a fee will apply (testing must occur within two years of taking the course). ••students taking BUS179 must achieve 35 wpm on a three-minute timing in order to achieve a certificate to enter the medical assistant program. For more information, consult with the MA Program Coordinator.

<table>
<thead>
<tr>
<th>CERTIFICATE REQUIREMENTS</th>
<th>32-33 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 .......................</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td></td>
</tr>
<tr>
<td>AH 101 .......................</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL TERMINOLOGY</td>
<td></td>
</tr>
<tr>
<td>AH 104 .......................</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL INSURANCE BILLING</td>
<td></td>
</tr>
<tr>
<td>AH 196 .......................</td>
<td>2</td>
</tr>
<tr>
<td>ELECTRONIC HEALTH RECORD</td>
<td></td>
</tr>
<tr>
<td>BIOL 115 ....................</td>
<td>4</td>
</tr>
<tr>
<td>INTRODUCTION TO ANATOMY &amp; PHYSIOLOGY</td>
<td></td>
</tr>
<tr>
<td>BUS 179 .....................</td>
<td>1</td>
</tr>
<tr>
<td>KEYBOARDING</td>
<td></td>
</tr>
<tr>
<td>BUS 180D ....................</td>
<td>3</td>
</tr>
<tr>
<td>WORD PROCESSING PART I</td>
<td></td>
</tr>
<tr>
<td>BUS 181C ....................</td>
<td>3</td>
</tr>
<tr>
<td>OFFICE PROCEDURES I DOCUMENT FORMATTING</td>
<td></td>
</tr>
<tr>
<td>BUS 195 .....................</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL RECORDS MANAGEMENT</td>
<td></td>
</tr>
<tr>
<td>CIS 120A ....................</td>
<td>3</td>
</tr>
<tr>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>MA 101 .....................</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL ASSISTANT ADMINISTRATIVE I</td>
<td></td>
</tr>
<tr>
<td>MA 105 .....................</td>
<td>2</td>
</tr>
<tr>
<td>MEDICAL ASSISTANT ADMINISTRATIVE II</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL 32-33
## Office Assistant Certificate

This certificate is designed to provide training and practice in basic office skills. This certificate will flow directly into the Administrative/Office Management, AAS.

### CERTIFICATE REQUIREMENTS 30 CR. HRS.

#### Fall (12 credits)
- ENG 101 ENGLISH COMPOSITION .................................................. 3
- BUS 167 PROFESSIONALISM IN YOUR CAREER ......................... 1
- BUS 179 KEYBOARDING .................................................. 1
- CIS 106 KEYBOARDING .................................................. 3
- BUS 179 GOOGLE APPS .................................................. 1
- CIS 119PP INTRODUCTION TO PRESENTATION GRAPHICS ........ 1
- CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS ........ 3

#### Winter (12 credits)
- BCOM 102 ADVANCED BUS AND TECH COMMUNICATIONS .......... 3
- BUS 180D WORD PROCESSING PART I .................................... 3
- BUS 181C OFFICE PROCEDURES I: DOCUMENT FORMATTING .... 3
- CIS 101EW DATABASE MANAGEMENT-ACCESS ........................... 1
- CIS 102EW INTERMEDIATE ELECTRONIC SPREADSHEETS ......... 1
- CIS 153A DATABASE MANAGEMENT-ACCESS ........................... 1

#### Fall or Summer (6 credits)
- BUS 182C OFFICE PROCEDURES II: DOCUMENT PRODUCTION .... 3
- BUS 280C WORD PROCESSING PART II ..................................... 3

**TOTAL 30**
Education Programs
(Degrees and Certificates)

Degree Programs

- Child Development Associate
- Instructional Assistant, Special Education
- Teacher Aide

Certificates

- Child Development Associate
- Infant-Toddler Development Associate

Criminal Background Check
State laws require a criminal background check of students interested in the field of Education, and students have to pass a criminal background check before starting fieldwork.

Felonies and some misdemeanor convictions may prevent you from completing fieldwork for the Education Program and getting a State of Michigan Home Care License. Students must have a clear criminal background check to begin the Education Program. Some school districts require classroom volunteers to obtain an FBI fingerprint check; the student is responsible for the cost of that FBI check.

Any student who becomes subject to criminal prosecution while participating in the Education Program is required to report such allegations immediately to the Education Program Director. Discovery of such may result in immediate dismissal from the class(es) and the program.

Professional Education Certificates
The national Child Development Associate (CDA) and Muskegon Community College’s certificates provide competency-based professional preparation for individuals interested in becoming preschool teachers. The national CDA credential is recognized throughout the country.
Associate in Applied Science
Child Development Associate

Students are focused on understanding the development of children from birth to eight years of age through hands-on practical fieldwork and classroom instruction. An emphasis will be placed on an anti-bias curriculum covering the physical, intellectual, emotional and social domains of development. Students will be prepared for the Child Development Associate (CDA) assessment process, as part of the national credential recognized by the Council for Professional Recognition. The degree prepares students to be preschool teachers, child care center directors, Head Start teachers, teacher aides and classroom assistants. This program is intended for direct employment into the field of early childhood education.

This program may be completed 100% online. All Education courses must be completed with a grade of “C” or better. This program may be completed 100% online, however not all classes in the program may be offered in an online format. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

GENERAL EDUCATION REQUIREMENTS 20-22 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 102</td>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>BUS 126</td>
<td>BUSINESS MATH</td>
<td></td>
</tr>
<tr>
<td>MATH 105</td>
<td>MATH FOR ELEMENTARY TEACHERS</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BUS 127</td>
<td>HUMAN RELATIONS</td>
<td></td>
</tr>
<tr>
<td>COM 101</td>
<td>ORAL COMMUNICATIONS</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From:</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>CIS 110</td>
<td>COMPUTER CONCEPTS</td>
<td></td>
</tr>
<tr>
<td>CIS 120A</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td></td>
</tr>
</tbody>
</table>

CAREER PROGRAM REQUIREMENTS 32 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 109A</td>
<td>THE PARENT-CHILD CONNECTION</td>
<td>3</td>
</tr>
<tr>
<td>ED 111A</td>
<td>INTRO TO EARLY CHILDHOOD EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ED 120C</td>
<td>ANTI-BIAS CURRICULUM IN EARLY CHILDHOOD</td>
<td>3</td>
</tr>
<tr>
<td>ED 210</td>
<td>CHILD CARE AND GUIDANCE</td>
<td>3</td>
</tr>
<tr>
<td>ED 211A</td>
<td>BEHAVIOR MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>ED 214A</td>
<td>INFANT AND TODDLER DEVELOPMENT AND CARE</td>
<td>3</td>
</tr>
<tr>
<td>ED 216A</td>
<td>EDUCATING EXCEPTIONAL CHILDREN</td>
<td>3</td>
</tr>
<tr>
<td>ED 220B</td>
<td>EARLY CHILDHOOD OBSERVATION &amp; ASSESSMENT</td>
<td>2</td>
</tr>
<tr>
<td>ED 230A</td>
<td>CHILDREN’S LITERATURE</td>
<td>3</td>
</tr>
</tbody>
</table>

CAREER PROGRAM REQUIREMENTS 3 CR.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 252B</td>
<td>CHILD DEVELOPMENT PRACTICUM</td>
<td>3</td>
</tr>
</tbody>
</table>

RECOMMENDED ELECTIVES 8-10 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS 100A</td>
<td>COLLEGE SUCCESS SEMINAR</td>
<td>2</td>
</tr>
<tr>
<td>ED 200A</td>
<td>LITERACY BIRTH TO FIVE</td>
<td>3</td>
</tr>
<tr>
<td>ED 202A</td>
<td>TEACHING OF READING IN THE ELEMENTARY SCHOOL</td>
<td>3</td>
</tr>
<tr>
<td>ED 223A</td>
<td>CHILD CARE CENTER ADMINISTRATION</td>
<td>3</td>
</tr>
<tr>
<td>ED 234A</td>
<td>EDUCATION PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ED 251A</td>
<td>HEALTH NEEDS OF THE YOUNG CHILD</td>
<td>3</td>
</tr>
<tr>
<td>MU 192</td>
<td>MUSIC FOR THE CLASSROOM TEACHER</td>
<td>4</td>
</tr>
<tr>
<td>SOC 101</td>
<td>PRINCIPLES OF SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>TH 108</td>
<td>THEATER FOR CHILDREN</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 62

Total Fieldwork Hours: 480

2023 - 2024 Muskegon Community College Catalog - 137
The certificate prepares students to apply for the Child Development Associate (CDA) credential in a center-based preschool program awarded by the Council for Professional Recognition. The requirements include the 120 formal hours of training and the 480 required fieldwork hours. The certificate prepares students for entry-level employment in an early childhood education environment or building into an associate degree. This program may be completed 100% online. All Education courses must be completed with a grade of “C” or better. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 109A</td>
<td>THE PARENT-CHILD CONNECTION</td>
<td>3</td>
</tr>
<tr>
<td>ED 111A</td>
<td>INTRO TO EARLY CHILDREN EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ED 120C</td>
<td>ANTI-BIAS CURRICULUM IN EARLY CHILDHOOD</td>
<td>3</td>
</tr>
<tr>
<td>ED 210</td>
<td>CHILD CARE AND GUIDANCE</td>
<td>3</td>
</tr>
<tr>
<td>ED 220A</td>
<td>EARLY CHILDHOOD OBSERVATION &amp; ASSESMENT</td>
<td>2</td>
</tr>
<tr>
<td>ED 252B</td>
<td>CHILD DEVELOPMENT PRACTICUM</td>
<td>3</td>
</tr>
</tbody>
</table>

Students are required to successfully complete
HE 100A Community First Aid and Safety or present
a valid CPR and First Aid card.

Total Fieldwork Hours: 480
Infant-Toddler Development Associate Certificate

The certificate prepares students to apply for Infant-Toddler Development Associates (CDA) credential in a center based infant-toddler program awarded by the Council for Professional Recognition. The environment will include non-mobile and mobile infants and toddlers. The requirements include the 120 formal hours of training and the 480 required fieldwork hours. The certificate prepares students for entry-level employment in an early childhood education environment or building into and associate degree. This program may be completed 100% online. All Education courses must be completed with a grade of “C” or better. This program may be completed 100% online, however not all classes in the program may be offered in an online format. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 111A</td>
<td>INTRO TO EARLY CHILDHOOD EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ED 120C</td>
<td>ANTI-BIAS CURRICULUM IN EARLY CHILDHOOD EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ED 210</td>
<td>CHILD CARE AND GUIDANCE</td>
<td>3</td>
</tr>
<tr>
<td>ED 214A</td>
<td>INFANT AND TODDLER DEVELOPMENT AND CARE</td>
<td>3</td>
</tr>
<tr>
<td>ED 220B</td>
<td>EARLY CHILDHOOD OBSERVATION &amp; ASSESSMENT</td>
<td>2</td>
</tr>
<tr>
<td>ED 252B</td>
<td>CHILD DEVELOPMENT PRACTICUM</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose One (1) Course from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 225A</td>
<td>CHILD DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ED 250A</td>
<td>HUMAN GROWTH AND LEARNING</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL 20

Students are required to successfully complete HE 100A Community First Aid and Safety or present a valid CPR and First Aid card.

Total Fieldwork Hours: 480
Associate in Applied Science

Instructional Assistant, Special Education

This degree is intended to prepare students to work as a paraprofessional or instructional assistant directly in a special needs environment. A paraprofessional will work directly under a certified teacher in a Pre-K to 12th grade classroom. Duties may include the assisting in the implementation of an Individualized Education Plan (IEP), assessment, observations, use of technology and personalized curriculum. Students must communicate effectively with parents, students, service teams and teachers. The degree is not designed to transfer to another program but is to go directly to the workforce. All Education courses must be completed with a grade of “C” or better. This program may be completed 100% online, however not all classes in the program may be offered in an online format. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

GENERAL EDUCATION REQUIREMENTS 20-22 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>BCOMM 102</td>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From: BUS 126, MATH 105</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From: BUS 127, COM 101</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From: CIS 110, CIS 120A</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

CAREER PROGRAM REQUIREMENTS 30 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 101B</td>
<td>INTRODUCTION TO EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ED 109A</td>
<td>THE PARENT-CHILD CONNECTION</td>
<td>3</td>
</tr>
<tr>
<td>ED 202A</td>
<td>TEACHING OF READING IN THE ELEMENTARY SCHOOL</td>
<td>3</td>
</tr>
<tr>
<td>ED 211A</td>
<td>BEHAVIOR MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>ED 216A</td>
<td>EDUCATING THE EXCEPTIONAL CHILDREN</td>
<td>3</td>
</tr>
<tr>
<td>ED 221A</td>
<td>TEACHING STUDENTS WITH LEARNING AND BEHAVIORAL PROBLEMS</td>
<td>3</td>
</tr>
<tr>
<td>ED 230A</td>
<td>CHILDREN’S LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ED 234A</td>
<td>EDUCATIONAL PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ED 272A</td>
<td>EDUCATION PRACTICUM</td>
<td>3</td>
</tr>
<tr>
<td>ED 220B</td>
<td>EARLY CHILDHOOD OBSERVATION &amp; ASSESSMENT</td>
<td>3</td>
</tr>
<tr>
<td>ED 251A</td>
<td>HEALTH NEEDS OF THE YOUNG CHILD</td>
<td>3</td>
</tr>
<tr>
<td>HE 100A</td>
<td>COMMUNITY FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>MU 192</td>
<td>MUSIC FOR THE CLASSROOM TEACHER</td>
<td>4</td>
</tr>
<tr>
<td>SOC 101</td>
<td>PRINCIPLES OF SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>TH 108</td>
<td>THEATER FOR CHILDREN</td>
<td>3</td>
</tr>
</tbody>
</table>

RECOMMENDED ELECTIVES 10-12 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS 100A</td>
<td>COLLEGE SUCCESS SEMINAR</td>
<td>3</td>
</tr>
<tr>
<td>ED 225A</td>
<td>CHILD DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ED 250A</td>
<td>HUMAN GROWTH AND LEARNING</td>
<td>3</td>
</tr>
<tr>
<td>ED 220B</td>
<td>EARLY CHILDHOOD OBSERVATION &amp; ASSESSMENT</td>
<td>3</td>
</tr>
<tr>
<td>ED 251A</td>
<td>HEALTH NEEDS OF THE YOUNG CHILD</td>
<td>3</td>
</tr>
<tr>
<td>HE 100A</td>
<td>COMMUNITY FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>MU 192</td>
<td>MUSIC FOR THE CLASSROOM TEACHER</td>
<td>4</td>
</tr>
<tr>
<td>SOC 101</td>
<td>PRINCIPLES OF SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>TH 108</td>
<td>THEATER FOR CHILDREN</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 62 CR. HRS. TOTAL FIELDWORK HOURS: 480
Associate in Applied Science
Teacher Aide

Muskegon Community College currently offers a program preparing paraprofessional workers to work in various grades/classrooms, latchkey programs, and child care centers. It is an opportunity for students to gain professional recognition for demonstrating competence in their profession. The Education Department is pleased to announce that students who complete two years of instruction can now receive the Associate in Applied Science Degree (AAS). Students desiring to transfer to a four-year institution should consult with a counselor. This curriculum is not designed as a transfer program. All Education courses must be completed with a grade of “C” or better. This program may be completed 100% online, however not all classes in the program may be offered in an online format. Please work closely with the MCC Counseling Office and/or faculty members to select courses offered 100% online.

GENERAL EDUCATION REQUIREMENTS 20-22 CR. HRS.
- ENG 101 ................................................................. 3
- ENGLISH COMPOSITION
- BCOM 102 ............................................................ 3
- ADVANCED BUS AND TECH COMMUNICATIONS
- Choose One (1) Course From: .............................. 3-4
  - BUS 126 BUSINESS MATH
  - MATH 105 MATH FOR ELEMENTARY TEACHERS
- Choose One (1) Course From: .............................. 3
  - BUS 127 HUMAN RELATIONS
  - COM 101 ORAL COMMUNICATIONS
- Choose One (1) Course From: .............................. 3
  - CIS 110 COMPUTER CONCEPTS
  - CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS
- Choose One (1) Course From: .............................. 3-4
  - GEOG 104 CULTURAL GEOGRAPHY
  - PHIL 205 BUSINESS ETHICS
  - PSCI 111 INTRO TO AMERICAN GOVERNMENT
  - PSCI 211 COMPARATIVE GOVERNMENTS
  - PSYC 102 APPLIED PSYCHOLOGY
  - PSYC 201 GENERAL PSYCHOLOGY
- PEA/DNC .............................................................. 2
- ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE

EDUCATION PRACTICUM
- ED 272A ................................................................. 3
- Choose One (1) Course From: .............................. 3
  - ED 225A CHILD DEVELOPMENT
  - ED 250A HUMAN GROWTH AND LEARNING

RECOMMENDED ELECTIVES 13-15 CR. HRS.
- CSS 100A .............................................................. 3
- COLLEGE SUCCESS SEMINAR
- ED 216A ................................................................. 3
- EDUCATING EXCEPTIONAL CHILDREN
- ED 251A ................................................................. 3
- HEALTH NEEDS OF THE YOUNG CHILD
- MU 192 ................................................................. 4
- MUSIC FOR THE CLASSROOM TEACHER
- SOC 101 ............................................................... 3
- PRINCIPLES OF SOCIOLOGY
- TH 108 ................................................................. 3
- THEATER FOR CHILDREN

TOTAL 62

Total Fieldwork Hours: 480
# Applied Technology Programs

(Degrees and Certificates)

STUDENTS MUST WEAR APPROVED SAFETY GLASSES WHERE HAZARDS EXIST.

<table>
<thead>
<tr>
<th>AAS Degree Programs</th>
<th>Certificates</th>
<th>Alternative &amp; Renewable Energy Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>Apprenticeship Certificate</td>
<td>Wind &amp; Solar Certificate</td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>Automotive Technician Certificate</td>
<td></td>
</tr>
<tr>
<td>Biomedical Engineering Technology</td>
<td>CAD/CNC Certificate</td>
<td></td>
</tr>
<tr>
<td>CAD/CNC</td>
<td>Computer-Aided Drafting and Design Certificate</td>
<td></td>
</tr>
<tr>
<td>Computer-Aided Drafting and Design</td>
<td>Electronics Technology Certificate</td>
<td></td>
</tr>
<tr>
<td>Electronics Engineering Technology</td>
<td>Food Science Certificate</td>
<td></td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>Industrial Electricity Certificate</td>
<td></td>
</tr>
<tr>
<td>Food Processing Technology</td>
<td>Manufacturing Automation Certificate</td>
<td></td>
</tr>
<tr>
<td>Machining Technology</td>
<td>Manufacturing Machine Repair Certificate (Industrial Maintenance)</td>
<td></td>
</tr>
<tr>
<td>Manufacturing Technology</td>
<td>Manufacturing Technology Certificate</td>
<td></td>
</tr>
<tr>
<td>Urban Forest Management</td>
<td>Mechatronics Certificate</td>
<td></td>
</tr>
<tr>
<td>Welding Technology</td>
<td>Patternmakers Certificate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quality Assurance Certificate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Welding Technology Certificate</td>
<td></td>
</tr>
</tbody>
</table>

- Apprenticeship Certificate
- Automotive Technician Certificate
- CAD/CNC Certificate
- Computer-Aided Drafting and Design Certificate
- Electronics Technology Certificate
- Food Science Certificate
- Industrial Electricity Certificate
- Machining Technology Certificate
- Manufacturing Automation Certificate
- Manufacturing Machine Repair Certificate (Industrial Maintenance)
- Manufacturing Technology Certificate
- Mechatronics Certificate
- Patternmakers Certificate
- Quality Assurance Certificate
- Welding Technology Certificate

- Wind & Solar Certificate
# Agriculture AAS Degree

The MCC curriculum, paired with courses within a particular Michigan State University Certificate Program, prepares students for entry-level employment in agricultural and agribusiness operations. Students will earn an MSU certificate while also working towards an associate degree. There are three available certificates from which to choose, listed following the MCC degree requirements. MSU Transfer Students: Students wishing to transfer to MSU as juniors must meet with the program coordinator during their first semester to alter general education courses to meet MSU requirements.

## General Education Requirements

**23-25 CR. HRS.**

Choose 2-Courses From:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION AND</td>
<td>3-5</td>
</tr>
<tr>
<td>BCOM 102</td>
<td>ADVANCED BUSINESS &amp; TECHNICAL COMMUNICATIONS OR</td>
<td>3-5</td>
</tr>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION AND</td>
<td>3-5</td>
</tr>
<tr>
<td>ENG 102</td>
<td>ENGLISH COMPOSITION</td>
<td>3-5</td>
</tr>
<tr>
<td>BIOL 121L&amp;L</td>
<td>PLANT BIOLOGY L&amp;L</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 127</td>
<td>HUMAN RELATIONS</td>
<td>3-5</td>
</tr>
<tr>
<td>HE 110</td>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td>3-5</td>
</tr>
</tbody>
</table>

Choose One (1) Course From:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 141</td>
<td>COLLEGE ALGEBRA</td>
<td>3-5</td>
</tr>
<tr>
<td>TMAT 101A</td>
<td>TECHNICAL MATH I</td>
<td>3-5</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
<td>3-5</td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
<td>3-5</td>
</tr>
<tr>
<td>CENG 203</td>
<td>COMPUTER CONCEPTS</td>
<td>3-5</td>
</tr>
<tr>
<td>CENG 204A</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td>3-5</td>
</tr>
<tr>
<td>FS 101L&amp;L</td>
<td>INTRO TO FOOD SCIENCE AND PROCESS</td>
<td>3-5</td>
</tr>
</tbody>
</table>

*All General Education courses must be completed with a grade of "C" or better for transfer.

## Required Electives

**3-9 MINIMUM CR. HRS.**  
Electives must be chosen from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 100</td>
<td>FUNDAMENTALS OF ACCOUNTING</td>
<td>3-5</td>
</tr>
<tr>
<td>ASL 101</td>
<td>AMERICAN SIGN LANGUAGE I</td>
<td>3-5</td>
</tr>
<tr>
<td>BIOL 113L&amp;L</td>
<td>INTRODUCTORY BIOLOGY</td>
<td>3-5</td>
</tr>
<tr>
<td>BIOL 207A</td>
<td>MICROBIOLOGY LAB</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 121</td>
<td>INTRODUCTION TO BUSINESS</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 122</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 125</td>
<td>SUPERVISION</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 131</td>
<td>INTRO TO ENTREPRENEURSHIP</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 221</td>
<td>SMALL BUSINESS MANAGEMENT</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 223</td>
<td>STARTING YOUR BUSINESS PLAN</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 240</td>
<td>ENTREPRENEURIAL CAPSTONE</td>
<td>3-5</td>
</tr>
<tr>
<td>BUS 260</td>
<td>PRINCIPLES OF MARKETING</td>
<td>3-5</td>
</tr>
<tr>
<td>CHEM 100L</td>
<td>FOUNDATIONS OF CHEMISTRY</td>
<td>3-5</td>
</tr>
<tr>
<td>CHEM 100A</td>
<td>FOUNDATIONS OF CHEMISTRY LAB</td>
<td>3-5</td>
</tr>
<tr>
<td>CHEM 101L</td>
<td>GENERAL AND INORGANIC CHEMISTRY</td>
<td>3-5</td>
</tr>
<tr>
<td>CHEM 101A</td>
<td>GENERAL AND INORGANIC CHEMISTRY LABORATORY</td>
<td>3-5</td>
</tr>
<tr>
<td>ECON 101A</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3-5</td>
</tr>
<tr>
<td>ECON 102A</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3-5</td>
</tr>
<tr>
<td>ELTC 101A</td>
<td>ELECTRICITY-BASIC</td>
<td>3-5</td>
</tr>
<tr>
<td>ELTC 103</td>
<td>RESIDENTIAL WIRING</td>
<td>3-5</td>
</tr>
<tr>
<td>ELTC 150</td>
<td>INDUSTRIAL ELECTRICITY</td>
<td>3-5</td>
</tr>
<tr>
<td>ENV 110L&amp;L</td>
<td>ENVIRONMENTAL SCIENCE</td>
<td>3-5</td>
</tr>
<tr>
<td>HP 101</td>
<td>HYDRAULICS/ PNEUMATICS</td>
<td>3-5</td>
</tr>
<tr>
<td>PHIL 207</td>
<td>ENVIRONMENTAL ETHICS</td>
<td>3-5</td>
</tr>
<tr>
<td>PSYCH 201</td>
<td>ENVIRONMENTAL PSYCHOLOGY</td>
<td>3-5</td>
</tr>
<tr>
<td>QC 101</td>
<td>BASIC QUALITY CONTROL</td>
<td>3-5</td>
</tr>
<tr>
<td>SPAN 101</td>
<td>BASIC SPANISH</td>
<td>3-5</td>
</tr>
<tr>
<td>SPAN 102</td>
<td>INTERMEDIATE SPANISH</td>
<td>3-5</td>
</tr>
<tr>
<td>SPAN 201</td>
<td>INTERMEDIATE SPANISH</td>
<td>3-5</td>
</tr>
<tr>
<td>W 101A</td>
<td>BASIC WELDING</td>
<td>3-5</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS 62**

---

2023 - 2024 Muskegon Community College Catalog - 143
MSU Occupational Specialty Requirements Credits: 30-34
(Select from the following MSU areas of interest – Agriculture Operations, Fruit & Vegetable Crop Management, and Landscape Management)

AGRICULTURE OPERATIONS – 34 HOURS, 62 CREDIT HOUR DEGREE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABM 130</td>
<td>Farm Management I</td>
<td>3</td>
</tr>
<tr>
<td>AE 131</td>
<td>Agricultural Water Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>AE 143</td>
<td>Application of Precision Agriculture Technologies</td>
<td>3</td>
</tr>
<tr>
<td>AT 202</td>
<td>Agricultural Regulation Compliance and Safety</td>
<td>3</td>
</tr>
<tr>
<td>AT 293</td>
<td>Professional Internship in Agricultural Technology</td>
<td>3</td>
</tr>
<tr>
<td>CSS 101</td>
<td>Introduction to Crop Science</td>
<td>3</td>
</tr>
<tr>
<td>CSS 105</td>
<td>Agriculture Industries Seminar</td>
<td>1</td>
</tr>
<tr>
<td>CSS 126</td>
<td>Introduction to Weed Management</td>
<td>2</td>
</tr>
<tr>
<td>CSS 143</td>
<td>Introduction to Soil Science</td>
<td>2</td>
</tr>
<tr>
<td>ENT 110</td>
<td>Applied Entomology of Economic Plants</td>
<td>3</td>
</tr>
<tr>
<td>PLP 105</td>
<td>Fundamentals of Applied Plant Pathology</td>
<td>2</td>
</tr>
</tbody>
</table>

A minimum of 6 additional MSU Institute for Agricultural Technology approved College of Agriculture and Natural Resources credits must be completed with approval from the Program Coordinator. Must send Muskegon CC an original MSU transcript with certificate noted for transfer acceptance.

FRUIT & VEGETABLE CROP MANAGEMENT – 30 CREDITS, 62 CREDIT HOUR DEGREE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABM 130</td>
<td>Farm Management I</td>
<td>3</td>
</tr>
<tr>
<td>AT 202</td>
<td>Agricultural Regulation Compliance and Safety</td>
<td>3</td>
</tr>
<tr>
<td>AT 293</td>
<td>Professional Internship in Agricultural Technology</td>
<td>3</td>
</tr>
<tr>
<td>CSS 126</td>
<td>Introduction to Weed Management</td>
<td>2</td>
</tr>
<tr>
<td>CSS 143</td>
<td>Introduction to Soil Science</td>
<td>2</td>
</tr>
<tr>
<td>ENT 110</td>
<td>Applied Entomology of Economic Plants</td>
<td>3</td>
</tr>
<tr>
<td>HRT 206</td>
<td>Training and Pruning Plants</td>
<td>1</td>
</tr>
<tr>
<td>HRT 207</td>
<td>Horticulture Career Development</td>
<td>1</td>
</tr>
<tr>
<td>HRT 218</td>
<td>Irrigation Systems for Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>PLP 105</td>
<td>Fundamentals of Applied Plant Pathology</td>
<td>2</td>
</tr>
</tbody>
</table>

A minimum of 7 additional MSU Institute for Agricultural Technology approved College of Agriculture and Natural Resources credits, of which must contain at least one elective class in either Fruit Production, Vegetable Production, Organic Production or Greenhouse Management, must be completed with approval from the Program Coordinator. Must send Muskegon CC an original MSU transcript with certificate noted for transfer acceptance.

LANDSCAPE MANAGEMENT – 30 CREDITS, 62 CREDIT HOUR DEGREE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 202</td>
<td>Agricultural Regulation, Compliance and Safety</td>
<td>3</td>
</tr>
<tr>
<td>AT 293</td>
<td>Professional Internship in Agricultural Technology</td>
<td>3</td>
</tr>
<tr>
<td>CSS 126</td>
<td>Introduction to Weed Management</td>
<td>2</td>
</tr>
<tr>
<td>CSS 143</td>
<td>Introduction to Soil Science</td>
<td>2</td>
</tr>
<tr>
<td>ENT 110</td>
<td>Applied Entomology of Economic Plants</td>
<td>3</td>
</tr>
<tr>
<td>HRT 207</td>
<td>Horticulture Career Development</td>
<td>1</td>
</tr>
<tr>
<td>HRT 211</td>
<td>Landscape Plants I</td>
<td>3</td>
</tr>
<tr>
<td>HRT 212</td>
<td>Landscape Plants II</td>
<td>3</td>
</tr>
<tr>
<td>HRT 213</td>
<td>Landscape Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>HRT 218</td>
<td>Irrigation Systems for Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>PLP 105</td>
<td>Fundamentals of Applied Plant Pathology</td>
<td>2</td>
</tr>
</tbody>
</table>

A minimum of 3 additional MSU Institute for Agricultural Technology approved College of Agriculture and Natural Resources credits must be completed with approval from the Program Coordinator. Must send Muskegon CC an original MSU transcript with certificate noted for transfer acceptance.

(See next page)
MSU Electives:

AT 290  Unmanned Aircraft FAA
AT 291  General Ag Employee Mgmt
HRT 206  Training and Pruning Plants
HRT 221  Greenhouse Structures and Management
HRT 232  Principles and Practices of Grape Production
HRT 234  Current Issues in Viticulture and Enology
HRT 242  Passive Solar Greenhouses for Protected Cultivation
HRT 243  Organic Transplant Production
HRT 251  Organic Farming Principles and Practices
HRT 253  Compost Production and Use
HRT 231  Tree Fruit Production and Management
HRT 241  Vegetable Production and Management
ABM 130  Farm Management I
AE 131  Water Resources Management
AT 291  Application of Animal Agriculture
AT 291  Unmanned Aircraft FAA
AT 291  Michigan Pollination & Bee Keeping
AT 291  Agricultural Transportation
Technical Apprenticeship Related Instruction

Muskegon Community College, in cooperation with Muskegon Area industrial employers, labor councils, and the U.S. Department of Labor help train skilled workers for the future needs of industry. Apprenticeship Training programs are divided into two parts: on-the-job training under the supervision of a journeyman in the trade, and a minimum of 576 hours of related classroom instruction at a Federally approved training site. Muskegon Community College provides the related classroom instruction which accompanies apprenticeship training programs.

Muskegon Community College does not select or place students in apprenticeship programs. It does provide the related technical courses which all apprentices must attend. Non-apprentices may also enroll in these courses to prepare themselves for a subsequent apprenticeship, or to upgrade their qualifications for their present jobs.

Any trade which is recognized as apprenticeable by the U.S. Bureau of Apprenticeship and Training may have a local apprentice training program. Local programs require the cooperation of employers and a joint apprenticeship committee representing management and labor.

For information on class schedules and entrance into specific programs, call the Apprenticeship Coordinator at Muskegon Community College.

Successful completion of an apprenticeship training program may be credited toward an Associate in Applied Science Degree Program.

Apprenticeship Certificate

This certificate program provides students with the foundation skills necessary to complete the academic portion of their apprenticeship. Students will learn basic technical skills required to build, install, repair, and service industrial equipment. Students who are interested in enrolling in this program must be a registered apprentice.

CERTIFICATE REQUIREMENTS 24 CR. HRS.

REQUIRED COURSES 3-5 CR. HRS.
Choose One (1) Course From .............................................. 3-5

- TMAT 101A  TECHNICAL MATH I
- TMAT 102A  TECHNICAL MATH II
- TMAT 201  TECHNICAL MATH III
- MATH 109A  COLLEGE ALGEBRA
- MATH 141  PRECALCULUS

ELECTIVES 19-21 CR. HRS.
Electives must be chosen from the following list or have departmental approval.

- AMT 129A ................................................................. 3
- ARE 115 ................................................................. 3
- WIND TURBINE AND SOLAR ARRAY INSTALLATION
- CAD 110 ................................................................. 3
- INTRODUCTION TO COMPUTER-AIDED DRAFTING (2D)
- CAD 135A ................................................................. 3
- ENGINEERING GRAPHICS
- CAD 150 ................................................................. 3
- BLUEPRINT READING
- CAD 151 ................................................................. 3
- GEOMETRIC DIMENSIONING & TOLERENCING
- CAD 210 ................................................................. 3
- PARAMETRIC DESIGN I-PART MODELING
- CAD 220A ................................................................. 4
- PARAMETRIC DESIGN II-ASSEMBLIES
- CAD 250 ................................................................. 3
- INTRODUCTION TO SOLIDWORKS 3D
- CAD 255 ................................................................. 3
- INTRODUCTION TO SIMENS NX
- CAD 260 ................................................................. 4
- CAD CAPSTONE
- ELTC 101AL&L .................................................. 4
- ELECTRICITY BASIC
- ELTC 103 ................................................................. 3
- RESIDENTIAL WIRING
- ELTC 104A ............................................................... 3
- BASIC INDUSTRIAL ROBOTS
- ELTC 106 ................................................................. 1
- FIRE ALARM SYSTEMS
- ELTC 150 ................................................................. 3
- INDUSTRIAL ELECTRICITY
- ELTC 152 ................................................................. 3
- NATIONAL ELECTRIC CODE
- ELTC 160L&L .................................................. 3
- PROGRAMMABLE CONTROLLERS
- ELTC 203 ................................................................. 3
- ADVANCED PROGRAMMABLE CONTROLLERS
ELTC 204A  ......................................................... 3
ADVANCED INDUSTRIAL ROBOTS

ELTC 210 ............................................................... 3
INDUSTRIAL COMMUNICATIONS

ELTC 220 ............................................................... 3
ELECTRICAL TROUBLESHOOTING

ELTR 101A ............................................................ 4
ELECTRONICS-BASIC

ELTR 102B ............................................................ 4
ELECTRONICS 1: ACTIVE DEVICES

ELTR 112A ............................................................ 4
DIGITAL ELECTRONICS I

ELTR 202B ............................................................ 4
INDUSTRIAL ELECTRONIC SYSTEMS

ELTR 212A ............................................................ 4

BIOMED 2

ELTR 214 ............................................................... 3
BIOMED 1

ENGR 105 ............................................................. 4
INTRODUCTION TO ENGINEERING

HE 110 ................................................................. 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

HP 101 ................................................................. 3
HYDRAULICS/PNEUMATICS

HP 201 ................................................................. 4
ADVANCED HYDRAULICS

MET 101 .............................................................. 3
INDUSTRIAL MATERIALS

MET 102 .............................................................. 3
BASIC CAST METALS

MET 201 .............................................................. 3
METALLURGY

MT 101B ............................................................... 4
BASIC MACHINING

MT 102A ............................................................... 3
INTERMEDIATE MACHINING

MT 103A ............................................................... 3
ADVANCED MACHINING

MT 150 ............................................................... 3
MACHINERY HANDBOOK

MT 205A ............................................................. 3
NC/CNC (COMPUTER NUMERICAL CONTROL)

MT 206A ............................................................. 3
2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

MT 216 ............................................................. 3
3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

MT 218 ............................................................. 3
5-AXIS CNC & CMM

MT 222 ............................................................. 3
MACHINING CAPSTONE

MT 240 ............................................................. 3
BASIC MACHINE REPAIR

PEA 103 .............................................................. 1
WEIGHT TRAINING

QC 101 .............................................................. 3
BASIC QUALITY CONTROL

QC 105 .............................................................. 3
QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL
PROCESS CONTROL

TECH 200 ........................................................... 3
APPLIED ALTERNATIVE AND RENEWABLE ENERGY

TECH 201A .......................................................... 3
INTRODUCTION TO MECHATRONICS

TECH 290C .......................................................... 3
COOPERATIVE INTERNSHIP

W 101A .............................................................. 3
BASIC WELDING

W 102A .............................................................. 3
GAS METAL ARC WELDING (MIG)

W 103A .............................................................. 3
GAS TUNGSTEN ARC WELDING (TIG)

W 105 ................................................................. 3
SHIELDED METAL ARC WELDING (STICK)

W 201 ................................................................. 3
STRUCTURAL WELDING

W 202A .............................................................. 3
PIPE WELDING

W 206 ................................................................. 3
METAL FABRICATION

TOTAL 24
Associate in Applied Science
Automotive Technology

This curriculum is designed to educate and train personnel to fill the mechanical, technical, and supervisory positions in the automotive industry. Successful completion of the program leads to the degree of Associate in Applied Science. Upon completing the program students will be prepared to work as an Auto Mechanic, Automotive Service Technician, Automotive Technician, or Automotive Parts Specialist. Students who wish to complete a program in two years are advised to use a sequence of courses recommended by their counselor or by the instructor. If a student wishes to attend college on less than a full-time basis, the program may be extended beyond two years.

GENERAL EDUCATION REQUIREMENTS 15-18 CR. HRS.

ENG 101 .................................................................3
ENGLISH COMPOSITION

Choose Four (4) Courses From: 12-17

ANTH 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY
BACH 102 ADVANCED BUS AND TECH COMMUNICATIONS
BUS 127 HUMAN RELATIONS
COM 201 PUBLIC SPEAKING
CSS 100A COLLEGE SUCCESS SEMINAR
ECON 101A PRINCIPLES OF MACROECONOMICS
ENG 102 ENGLISH COMPOSITION
HUM 195 INTRODUCTION TO HUMANITIES
MATH 109A COLLEGE ALGEBRA
MATH 141 PRECALCULUS
PHIL 102 PRINCIPLES OF LOGIC
PHIL 202 INTRODUCTION TO ETHICS
PSYC 201 GENERAL PSYCHOLOGY
SOC 101 PRINCIPLES OF SOCIOLOGY
TMAT 101A TECHNICAL MATH I
TMAT 102A TECHNICAL MATH II
TMAT 201 TECHNICAL MATH III

AUTOMOTIVE TECHNOLOGY REQUIREMENTS 18 CR. HRS.

AT 114 .................................................................3
AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)
AT 120 .................................................................3
INTRODUCTION TO ELECTRICAL SYSTEMS I
AT 122 .................................................................3
FUEL SYSTEMS AND EMISSION CONTROLS
AT 150A .................................................................3
AUTOMOTIVE BRAKES
AT 210 .................................................................3
POWER TRAINS (MANUAL DRIVETRAINS)
AT 212 .................................................................3
ALIGNMENT AND SUSPENSION

CHOOSE 1 OPTION 23-24 CR-HRS.

OPTION 1: AUTOMOTIVE MANAGEMENT TRACK

AT 121 .................................................................3
ELECTRICAL SYSTEMS II
AT 123 .................................................................3
ENGINE TUNE UP (DRIVABILITY)
AT 140 .................................................................3
INTRO TO HYBRIDS AND ALTERNATIVE FUELS
AT 160A .................................................................3
AUTOMOTIVE AIR CONDITIONING

AT 211 .................................................................3
AUTOMATIC TRANSMISSIONS
AT 214 .................................................................3
SERVICE MANAGEMENT
AT 223 .................................................................3
ADVANCED ENGINE PERFORMANCE
AT 230 .................................................................2
AUTOMOTIVE SERVICE

OPTION 2: AUTOMOTIVE ENGINEERING TRACK

ECON 101A ...........................................................4
PRINCIPLES OF MACROECONOMICS
HIST 101 ...............................................................4
WESTERN CIVILIZATION TO 1500
MATH 161 ...............................................................4
CALCULUS I
PHIL 202 ...............................................................3
INTRODUCTION TO ETHICS
PHYS 201 CL&L .....................................................5
COLLEGE PHYSICS I LECTURE AND LAB
PSYC 201 ...............................................................4
GENERAL PSYCHOLOGY

REQUIRED ELECTIVES MINIMUM 0-5 CR. HRS.

Electives must be chosen from the following list or have departmental approval.

COM 201 .................................................................3
PUBLIC SPEAKING
CSS 100A ...............................................................3
COLLEGE SUCCESS SEMINAR
ECON 101A ...........................................................4
PRINCIPLES OF MACROECONOMICS
HE 110 .................................................................1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING
HP 101 .................................................................3
HYDRAULICS/PNEUMATICS
MET 101 ...............................................................3
INDUSTRIAL MATERIALS
MET 201 ...............................................................3
METALLURGY
MT 101B ...............................................................4
BASIC MACHINING
PHYS 201 CL&L .....................................................5
COLLEGE PHYSICS I LECTURE AND LAB
W 101A .................................................................3
BASIC WELDING
TECH 290C ............................................................3
COORDINATED INTERNSHIP

TOTAL 60
Automotive Technician Certificate

The curriculum is designed to educate and train personnel to fill the mechanical, technical, and supervisory position in the automotive industry. Upon completing the program students will be prepared to work as an Auto Mechanic, Automotive Service Technician, Automotive Technician, or Automotive Parts Specialist. Students planning to transfer should consult with an MCC counselor. This is intended to go directly into the workforce.

CERTIFICATE REQUIREMENTS

30-32 CR. HRS.

Choose One (1) Course From:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMAT 101A</td>
<td>TECHNICAL MATH I</td>
<td>3-5</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
<td></td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
<td></td>
</tr>
<tr>
<td>MATH 109A</td>
<td>COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS</td>
<td></td>
</tr>
</tbody>
</table>

AT 114.................................................................3
AUTOMOTIVE POWER PLANTS
(ENGINE REBUILDING)
AT 120.................................................................3
INTRO TO ELECTRICAL SYSTEMS I
AT 121.................................................................3
ELECTRICAL SYSTEMS II
AT 122.................................................................3
FUEL SYSTEMS AND EMISSION CONTROLS
AT 123.................................................................3
ENGINE TUNE
AT 150A.................................................................3
AUTOMOTIVE BRAKES
AT 160A.................................................................3
AUTOMOTIVE AIR CONDITIONING
AT 210.................................................................3
POWERTRAINS (MANUAL DRIVETRAINS)
AT 212.................................................................3
ALIGNMENT AND SUSPENSION

TOTAL 30-32
Associate in Applied Science
Biomedical Engineering Technology

This curriculum is designed to prepare a student for employment as a Biomedical Technician. The biomedical electronics technician is a person knowledgeable in the theory of operation, the underlying physiological principles, and the safe clinical application of biomedical equipment. Responsibilities may include installation, calibration, inspection, preventive maintenance, and repair of general biomedical and related technical equipment. The technician might be involved in the operation of equipment and in equipment control, safety, and maintenance. Upon completing this program students will be prepared to work as a Biomedical Technician, Biomedical Electronics Technician or Electronics Technician. Students planning to transfer to a four-year college should consult with an MCC Counselor.

GENERAL EDUCATION REQUIREMENTS 21-25 CR. HRS.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td></td>
</tr>
<tr>
<td>HE 110</td>
<td>1</td>
</tr>
<tr>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td></td>
</tr>
<tr>
<td>Choose two (2) Courses From</td>
<td>6-8</td>
</tr>
<tr>
<td>ANTH 103</td>
<td></td>
</tr>
<tr>
<td>CULTURAL DIVERSITY IN</td>
<td></td>
</tr>
<tr>
<td>CONTEMPORARY SOCIETY</td>
<td></td>
</tr>
<tr>
<td>BCOM 102</td>
<td></td>
</tr>
<tr>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td></td>
</tr>
<tr>
<td>BUS 127</td>
<td></td>
</tr>
<tr>
<td>HUMAN RELATIONS</td>
<td></td>
</tr>
<tr>
<td>COM 201</td>
<td></td>
</tr>
<tr>
<td>PUBLIC SPEAKING</td>
<td></td>
</tr>
<tr>
<td>CSS 100A</td>
<td></td>
</tr>
<tr>
<td>COLLEGE SUCCESS SEMINAR</td>
<td></td>
</tr>
<tr>
<td>ECON 101A</td>
<td></td>
</tr>
<tr>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td></td>
</tr>
<tr>
<td>ENG 102</td>
<td></td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td></td>
</tr>
<tr>
<td>HUM 195</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION TO HUMANITIES</td>
<td></td>
</tr>
<tr>
<td>PHIL 102</td>
<td></td>
</tr>
<tr>
<td>PRINCIPLES OF LOGIC</td>
<td></td>
</tr>
<tr>
<td>PHIL 202</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION TO ETHICS</td>
<td></td>
</tr>
<tr>
<td>PSYC 201</td>
<td></td>
</tr>
<tr>
<td>GENERAL PSYCHOLOGY</td>
<td></td>
</tr>
<tr>
<td>SOC 101</td>
<td></td>
</tr>
<tr>
<td>PRINCIPLES OF SOCIOLOGY</td>
<td></td>
</tr>
<tr>
<td>Choose one (1) Courses From</td>
<td>3-5</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td></td>
</tr>
<tr>
<td>TECHNICAL MATH II</td>
<td></td>
</tr>
<tr>
<td>TMAT 201</td>
<td></td>
</tr>
<tr>
<td>TECHNICAL MATH III</td>
<td></td>
</tr>
<tr>
<td>MATH 109A</td>
<td></td>
</tr>
<tr>
<td>COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td>MATH 141</td>
<td></td>
</tr>
<tr>
<td>PRECALCULUS</td>
<td></td>
</tr>
<tr>
<td>BIOL 152L&amp;L</td>
<td>4</td>
</tr>
<tr>
<td>ANATOMY &amp; PHYSIOLOGY I</td>
<td></td>
</tr>
<tr>
<td>BIOL 252L&amp;L</td>
<td>4</td>
</tr>
<tr>
<td>ANATOMY &amp; PHYSIOLOGY II</td>
<td></td>
</tr>
</tbody>
</table>

TECHNICAL-RELATED REQUIREMENTS 41 CR. HRS.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 120A</td>
<td>3</td>
</tr>
<tr>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>CIS 183</td>
<td></td>
</tr>
<tr>
<td>NETWORKING TECHNOLOGIES</td>
<td></td>
</tr>
<tr>
<td>ELTC 101AL&amp;L</td>
<td>4</td>
</tr>
<tr>
<td>ELECTRICITY BASIC</td>
<td></td>
</tr>
<tr>
<td>ELTC 150</td>
<td>3</td>
</tr>
<tr>
<td>INDUSTRIAL ELECTRICITY</td>
<td></td>
</tr>
<tr>
<td>ELTC 220</td>
<td></td>
</tr>
<tr>
<td>ELECTRICAL TROUBLESHOOTING</td>
<td>4</td>
</tr>
<tr>
<td>ELTR 101A</td>
<td></td>
</tr>
<tr>
<td>ELECTRONICS-BASIC</td>
<td></td>
</tr>
<tr>
<td>ELTR 102B</td>
<td>4</td>
</tr>
<tr>
<td>ELECTRONICS 1: ACTIVE DEVICES</td>
<td></td>
</tr>
<tr>
<td>ELTR 112A</td>
<td>4</td>
</tr>
<tr>
<td>DIGITAL ELECTRONICS I</td>
<td></td>
</tr>
<tr>
<td>ELTR 212A</td>
<td>4</td>
</tr>
<tr>
<td>BIOMEDICAL INSTRUMENTATION II</td>
<td></td>
</tr>
<tr>
<td>ELTR 214</td>
<td>3</td>
</tr>
<tr>
<td>BIOMEDICAL INSTRUMENTATION I</td>
<td></td>
</tr>
<tr>
<td>TECH 290CI</td>
<td>6</td>
</tr>
<tr>
<td>COOPERATIVE INTERNSHIP</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL 62-66
Associate in Applied Science
CAD/CNC

This program is designed to provide basic training in Computer-Aided Design skills (CAD) combined with the application of Computer Numerical Control (CNC) programming and machining skills. Upon completing this program students will be prepared to work as a CNC Operator, CNC Machinist, CNC Programmer, CAD Operator, or CAD/CAM Operator. This program is offered for full-time and part-time, day or night, as well as Early College and Dual Enrollment students. Students planning to transfer to a four-year college should consult with an MCC Counselor.

### General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>HE 110</td>
<td><em>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</em></td>
<td>1</td>
</tr>
<tr>
<td>Anthropology</td>
<td>ANT 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</td>
<td>3</td>
</tr>
<tr>
<td>Bus</td>
<td>BUS 127 HUMAN RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td>Com</td>
<td>COM 201 PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td>CSS 100A</td>
<td>COLLEGE SUCCESS SEMINAR</td>
<td>3</td>
</tr>
<tr>
<td>Econ</td>
<td>ECON 101A PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>Eng</td>
<td>ENG 102 ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>Hum</td>
<td>HUM 195 INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>Phil</td>
<td>PHIL 102 PRINCIPLES OF LOGIC</td>
<td>3</td>
</tr>
<tr>
<td>Phil 202</td>
<td>INTRODUCTION TO ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>Psyc</td>
<td>PSYC 201 GENERAL PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>PRINCIPLES OF SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose Two (2) TMAT Courses or MATH 141... 5-6

**Machinering Technology Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT 101B</td>
<td>BASIC MACHINING</td>
<td>4</td>
</tr>
<tr>
<td>Mt 102A</td>
<td>INTERMEDIATE MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>Mt 205A</td>
<td>N/C/C (COMPUTER NUMERICAL CONTROL)</td>
<td>3</td>
</tr>
<tr>
<td>Mt 206A</td>
<td>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>Mt 216</td>
<td>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>Mt 222</td>
<td>MACHINING CAPSTONE</td>
<td>3</td>
</tr>
<tr>
<td>CAD 260</td>
<td>CAD CAPSTONE</td>
<td>3</td>
</tr>
</tbody>
</table>

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.
### REQUIRED ELECTIVES  

13-17 CR. HRS.  

Electives must be chosen from the following list or have departmental approval.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 129A</td>
<td>INTRODUCTION TO TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>CAD 135A</td>
<td>ENGINEERING GRAPHICS</td>
<td>3</td>
</tr>
<tr>
<td>CAD 150</td>
<td>BLUERNET READING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 151</td>
<td>GEOMETRIC DIMENSIONING &amp; TOLERENCING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 220A</td>
<td>PARAMETRIC DESIGN II-ASSEMBLIES</td>
<td>4</td>
</tr>
<tr>
<td>CAD 254</td>
<td>SOLIDWORKS II</td>
<td>4</td>
</tr>
<tr>
<td>CSS 100A</td>
<td>INTRODUCTION TO SIEMENS NX</td>
<td>3</td>
</tr>
<tr>
<td>COM 201</td>
<td>COLLEGE SUCCESS SEMINAR</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 101AL&amp;L</td>
<td>PUBLIC SPEAKING</td>
<td>4</td>
</tr>
<tr>
<td>ELTC 104A</td>
<td>ELECTRICITY-BASIC</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 150</td>
<td>BASIC INDUSTRIAL ROBOTS</td>
<td>3</td>
</tr>
<tr>
<td>ELTR 101A</td>
<td>INDUSTRIAL ELECTRICITY</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 105</td>
<td>ELECTRONICS-BASIC</td>
<td>4</td>
</tr>
<tr>
<td>HP 101</td>
<td>INTRODUCTION TO ENGINEERING</td>
<td>3</td>
</tr>
<tr>
<td>HP 201</td>
<td>HYDRAULICS/PNEUMATICS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 161</td>
<td>ADVANCED HYDRAULICS</td>
<td>4</td>
</tr>
<tr>
<td>MATH 162A</td>
<td>CALCULUS I</td>
<td>4</td>
</tr>
<tr>
<td>MET 101</td>
<td>INDUSTRIAL MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>MET 150</td>
<td>ADVANCED MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>MT 103A</td>
<td>MACHINERY HANDBOOK</td>
<td>3</td>
</tr>
<tr>
<td>QC 101</td>
<td>BASIC QUALITY CONTROL</td>
<td>3</td>
</tr>
<tr>
<td>TECH 290CI</td>
<td>5-AXIS, CNC &amp; CMM</td>
<td>3</td>
</tr>
<tr>
<td>TECH 201A</td>
<td>COOPERATIVE INTERNSHIP</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 101A</td>
<td>INTRODUCTION TO MECHATRONICS</td>
<td>3</td>
</tr>
<tr>
<td>W 101A</td>
<td>BASIC WELDING</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 60**
**CAD/CNC Certificate**

This program is designed to provide Computer Aided Design skills (CAD) combined with the application of Computer Numerical Control (CNC) programming and machining skills. Upon completing this program students will be prepared to work as a CNC programmer, CNC operator, CNC draftsman, CAD designer, or CAD programmer. This program is not designed for students wishing to transfer to a four-year college for a bachelor’s degree. Students planning to transfer should consult with an MCC counselor. This is intended to go directly into the workforce.

**CERTIFICATE REQUIREMENTS**

**31-33 CR. HRS.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 110</td>
<td>INTRO TO COMPUTER-AIDED DRAFTING (2D)</td>
<td>3</td>
</tr>
<tr>
<td>CAD 150</td>
<td>BLUEPRINT READING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 210</td>
<td>PARAMETRIC DESIGN I-PART MODELING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 250</td>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
<td>3</td>
</tr>
<tr>
<td>MT 101B</td>
<td>BASIC MACHINING</td>
<td>4</td>
</tr>
<tr>
<td>MT 150</td>
<td>MACHINERY HANDBOOK</td>
<td>3</td>
</tr>
<tr>
<td>MT 205A</td>
<td>NC/CNC (COMPUTER NUMERICAL CONTROL)</td>
<td>3</td>
</tr>
<tr>
<td>MT 206A</td>
<td>2-D CAD/CAM COMPUTER-AIDED DESIGN/MAChINING</td>
<td>3</td>
</tr>
<tr>
<td>MT 216</td>
<td>3-D CAD/CAM COMPUTER-AIDED DESIGN/MAChINING</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose One (1) Courses From: 3-5

- TMAT 102A  TECHNICAL MATH II
- TMAT 201   TECHNICAL MATH III
- MATH 141   PRECALCULUS

**TOTAL 31-33**
## Associate in Applied Science
### Computer-Aided Design Technology

Are you a creative thinker with a passion for developing ideas from concept to production? Do you enjoy creating something tangible out of an abstract idea? If the answer is yes, explore a career in Computer-Aided Design, CAD. CAD professionals use 2D and 3D CAD software to create designs. In addition, your career could include assisting local businesses to build everything from automotive and aerospace components to machine parts and assemblies. Upon completing this program students will be prepared to work as CAD Designers, CAD Detailers, CAD Technicians or CAD Drafters. If a student plans to transfer to a four-year college, they can transfer to an engineering technology degree. These students should consult with an MCC Counselor to be sure they are taking classes to transfer.

### General Education Requirements

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td></td>
</tr>
<tr>
<td>HE 110</td>
<td>1</td>
</tr>
<tr>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td></td>
</tr>
</tbody>
</table>

Choose one (1) Course From

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOM 102</td>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
</tr>
<tr>
<td>COM 201</td>
<td>PUBLIC SPEAKING</td>
</tr>
<tr>
<td>ENG 102</td>
<td>ENGLISH COMPOSITION</td>
</tr>
</tbody>
</table>

Choose one (1) Course From

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 127</td>
<td>HUMAN RELATIONS</td>
</tr>
<tr>
<td>ECON 101A</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
</tr>
<tr>
<td>HUM 195</td>
<td>INTRODUCTION TO HUMANITIES</td>
</tr>
<tr>
<td>PHIL 102</td>
<td>PRINCIPLES OF LOGIC</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>INTRODUCTION TO ETHICS</td>
</tr>
<tr>
<td>PSYC 201</td>
<td>GENERAL PSYCHOLOGY</td>
</tr>
<tr>
<td>SOC 101</td>
<td>PRINCIPLES OF SOCIOLOGY</td>
</tr>
</tbody>
</table>

Choose Two (2) TMAT Courses or MATH 141

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS (RECOMMENDED FOR TRANSFER)</td>
</tr>
</tbody>
</table>

### Technical-Related Required Electives

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 220A</td>
<td>4</td>
</tr>
<tr>
<td>PARAMETRIC DESIGN II - ASSEMBLIES</td>
<td></td>
</tr>
<tr>
<td>CAD 254</td>
<td></td>
</tr>
<tr>
<td>SOLIDWORKS II</td>
<td></td>
</tr>
<tr>
<td>AMT 129A</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO TECHNOLOGY</td>
<td></td>
</tr>
<tr>
<td>MET 201</td>
<td>3</td>
</tr>
<tr>
<td>METALLURGY</td>
<td></td>
</tr>
<tr>
<td>MT 101B</td>
<td>4</td>
</tr>
<tr>
<td>BASIC MACHINING</td>
<td></td>
</tr>
<tr>
<td>ENGR 105</td>
<td>4</td>
</tr>
<tr>
<td>INTRODUCTION TO ENGINEERING</td>
<td></td>
</tr>
<tr>
<td>ELTC 101A&amp;L</td>
<td>4</td>
</tr>
<tr>
<td>ELECTRICITY-BASIC</td>
<td></td>
</tr>
<tr>
<td>PHYS 201A&amp;L</td>
<td>5</td>
</tr>
<tr>
<td>COLLEGE PHYSICS 1 LECTURE AND LAB (RECOMMENDED FOR TRANSFER)</td>
<td></td>
</tr>
</tbody>
</table>

### Computer-Aided Design Technology Requirements

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 110</td>
<td>3</td>
</tr>
<tr>
<td>INTRO TO COMPUTER-AIDED DRAFTING (2D)</td>
<td></td>
</tr>
<tr>
<td>CAD 135A</td>
<td>3</td>
</tr>
<tr>
<td>ENGINEERING GRAPHICS</td>
<td></td>
</tr>
<tr>
<td>CAD 150</td>
<td>3</td>
</tr>
<tr>
<td>BLUEPRINT READING</td>
<td></td>
</tr>
<tr>
<td>CAD 151</td>
<td>3</td>
</tr>
<tr>
<td>GEOMETRIC DIMENSIONING &amp; TOLERANCING</td>
<td></td>
</tr>
<tr>
<td>CAD 210</td>
<td>3</td>
</tr>
<tr>
<td>PARAMETRIC DESIGN I-PART MODELING</td>
<td></td>
</tr>
<tr>
<td>CAD 250</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
<td></td>
</tr>
<tr>
<td>CAD 260</td>
<td>4</td>
</tr>
<tr>
<td>CAD CAPSTONE</td>
<td></td>
</tr>
</tbody>
</table>
REQUIRED ELECTIVES  5-8 CR. HRS.

Electives must be chosen from the following list or have departmental approval.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 179</td>
<td>Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>CAD 255</td>
<td>CAD 255</td>
<td>3</td>
</tr>
<tr>
<td>COM 101</td>
<td>Introduction to Siemens NX</td>
<td>3</td>
</tr>
<tr>
<td>COM 201</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CSS 100A</td>
<td>College Success Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HP 101</td>
<td>Hydraulics/Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 141</td>
<td>Pre-Calculus (Recommended for Transfer)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 161</td>
<td>Calculus I (Recommended for Transfer)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 162A</td>
<td>Calculus II (Recommended for Transfer)</td>
<td>4</td>
</tr>
<tr>
<td>MET 101</td>
<td>Industrial Materials</td>
<td>3</td>
</tr>
<tr>
<td>MET 102</td>
<td>Basic Cast Metals</td>
<td>3</td>
</tr>
<tr>
<td>MT 102A</td>
<td>Intermediate Machining</td>
<td>3</td>
</tr>
<tr>
<td>MT 103A</td>
<td>Advanced Machining</td>
<td>3</td>
</tr>
<tr>
<td>MT 150</td>
<td>Machinery Handbook</td>
<td>3</td>
</tr>
<tr>
<td>MT 205A</td>
<td>NC/Ncnc (Computer Numerical Control)</td>
<td>3</td>
</tr>
<tr>
<td>MT 206A</td>
<td>2-D Cad/Cam Computer-Aided Design/Machining</td>
<td>3</td>
</tr>
<tr>
<td>MT 216</td>
<td>3-D Cad/Cam Computer-Aided Design/Machining</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 202C</td>
<td>College Physics II Lecture and Lab</td>
<td>5</td>
</tr>
<tr>
<td>QC 101</td>
<td>Basic Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>TECH 201A</td>
<td>Introduction to Mechatronics</td>
<td>3</td>
</tr>
<tr>
<td>TECH 290C</td>
<td>Cooperative Internship</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 101A</td>
<td>Technical Math I</td>
<td>3</td>
</tr>
<tr>
<td>W 101A</td>
<td>Basic Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 60**
Computer-Aided Design Technology Certificate

Are you a creative thinker with a passion for developing ideas from concept to production? Do you enjoy creating something tangible out of an abstract idea? If the answer is yes, explore a career in Computer-Aided Design, CAD. CAD professionals use 2D and 3D CAD software to create designs. In addition, your career could include assisting local businesses to build everything from automotive and aerospace components to machine parts and assemblies. Upon completing this program students will be prepared to work as CAD Designers, CAD Detailers, CAD Technicians or CAD Drafters. If a student plans to transfer to a four-year college, they can transfer to an engineering technology degree. These students should consult with an MCC Counselor to be sure they are taking classes to transfer.

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 110</td>
<td>INTRO TO COMPUTER-AIDED DRAFTING (2D)</td>
<td>3</td>
</tr>
<tr>
<td>CAD 135A</td>
<td>ENGINEERING GRAPHICS</td>
<td>3</td>
</tr>
<tr>
<td>CAD 150</td>
<td>BLUEPRINT READING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 151</td>
<td>GEOMETRIC DIMENSIONING &amp; TOLERENCING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 210</td>
<td>PARAMETRIC DESIGN I-PART MODELING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 250</td>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
<td>5-6</td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
<td></td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS (RECOMMENDED FOR TRANSFER)</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 23-24**
## Associate in Applied Science
### Electronics Engineering Technology

This curriculum is designed to prepare a student for employment as an electrical and electronics technician in manufacturing, commercial repair, or service industries. Upon completing this program students will be prepared to work as an Electronics Technician, Automation Technician, or a Mechatronics Technician. Students planning to transfer to a four-year college should consult with an MCC counselor.

<table>
<thead>
<tr>
<th>PROGRAMS</th>
<th>15-19 CR. HRS.</th>
<th>REQUIRED ELECTIVES</th>
<th>14-18 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL EDUCATION REQUIREMENTS</td>
<td>3</td>
<td>Electives must be chosen from the following list or have departmental approval.</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>3</td>
<td>AMT 129A</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choose three (3) Courses From</td>
<td>9-11</td>
<td>INTRODUCTION TO TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 103</td>
<td>3</td>
<td>ARE 115</td>
<td>3</td>
</tr>
<tr>
<td>CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</td>
<td></td>
<td>WIND TURBINE AND SOLAR ARRAY INSTALLATION</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 102</td>
<td>3</td>
<td>BUS 125</td>
<td>3</td>
</tr>
<tr>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
<td></td>
<td>SUPERVISION</td>
<td>3</td>
</tr>
<tr>
<td>BUS 127</td>
<td>3</td>
<td>CAD 110</td>
<td>3</td>
</tr>
<tr>
<td>HUMAN RELATIONS</td>
<td></td>
<td>INTRO TO COMPUTER-AIDED DRAFTING (2D)</td>
<td>3</td>
</tr>
<tr>
<td>COM 201</td>
<td>3</td>
<td>CAD 135A</td>
<td>3</td>
</tr>
<tr>
<td>PUBLIC SPEAKING</td>
<td></td>
<td>ENGINEERING GRAPHICS</td>
<td>3</td>
</tr>
<tr>
<td>CSS 100A</td>
<td>3</td>
<td>CAD 210</td>
<td>3</td>
</tr>
<tr>
<td>COLLEGE SUCCESS SEMINAR</td>
<td></td>
<td>PARAMETRIC DESIGN I-PART MODELING</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101A</td>
<td>3</td>
<td>CAD 250</td>
<td>3</td>
</tr>
<tr>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td></td>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102</td>
<td>3</td>
<td>COM 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td></td>
<td>ORAL COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>HUM 195</td>
<td>3</td>
<td>CSS 100A</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO HUMANITIES</td>
<td></td>
<td>COLLEGE SUCCESS SEMINAR</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 102</td>
<td>3</td>
<td>ELTC 103</td>
<td>3</td>
</tr>
<tr>
<td>PRINCIPLES OF LOGIC</td>
<td></td>
<td>RESIDENTIAL WIRING</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>3</td>
<td>ELTC 104A</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO ETHICS</td>
<td></td>
<td>BASIC INDUSTRIAL ROBOTS</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 201</td>
<td>3</td>
<td>ELTC 106</td>
<td>1</td>
</tr>
<tr>
<td>GENERAL PSYCHOLOGY</td>
<td></td>
<td>FIRE ALARM SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
<td>ELTC 150</td>
<td>3</td>
</tr>
<tr>
<td>PRINCIPLES OF SOCIOLOGY</td>
<td></td>
<td>INDUSTRIAL ELECTRICITY</td>
<td>3</td>
</tr>
<tr>
<td>ELECTRONIC TECHNOLOGY REQUIREMENTS</td>
<td>29 CR. HRS.</td>
<td>ELTC 152</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 101AL&amp;L</td>
<td>4</td>
<td>NATIONAL ELECTRIC CODE</td>
<td>3</td>
</tr>
<tr>
<td>ELECTRICITY-BASIC</td>
<td></td>
<td>ELTC 203</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 160L&amp;L</td>
<td>3</td>
<td>ADVANCED PROGRAMMABLE CONTROLLERS</td>
<td>3</td>
</tr>
<tr>
<td>PROGRAMMABLE CONTROLLERS</td>
<td></td>
<td>ELTC 204A</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 210</td>
<td>3</td>
<td>ADVANCED INDUSTRIAL ROBOTS</td>
<td>3</td>
</tr>
<tr>
<td>INDUSTRIAL COMMUNICATIONS</td>
<td></td>
<td>ELTR 212A</td>
<td>4</td>
</tr>
<tr>
<td>ELTC 220</td>
<td>3</td>
<td>BIOMEDICAL INSTRUMENTATION II</td>
<td>4</td>
</tr>
<tr>
<td>ELECTRICAL TROUBLESHOOTING</td>
<td></td>
<td>ELTR 214</td>
<td>3</td>
</tr>
<tr>
<td>ELTR 101A</td>
<td>4</td>
<td>BIOMEDICAL INSTRUMENTATION I</td>
<td>3</td>
</tr>
<tr>
<td>ELECTRONICS-BASIC</td>
<td></td>
<td>ENGR 105</td>
<td>4</td>
</tr>
<tr>
<td>ELTR 102B</td>
<td>4</td>
<td>INTRODUCTION TO ENGINEERING</td>
<td>4</td>
</tr>
<tr>
<td>ELECTRONICS I: ACTIVE DEVICES</td>
<td></td>
<td>HE 110</td>
<td>1</td>
</tr>
<tr>
<td>ELTR 112A</td>
<td>4</td>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td>3</td>
</tr>
<tr>
<td>DIGITAL ELECTRONICS I</td>
<td></td>
<td>HP 101</td>
<td>3</td>
</tr>
<tr>
<td>ELTR 202B</td>
<td>4</td>
<td>HYDRAULICS/PNEUMATICS</td>
<td>3</td>
</tr>
</tbody>
</table>

(CONTINUED ON NEXT PAGE)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 201</td>
<td>ADVANCED HYDRAULICS</td>
<td>4</td>
</tr>
<tr>
<td>MATH 161</td>
<td>CALCULUS I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 162A</td>
<td>CALCULUS II</td>
<td>4</td>
</tr>
<tr>
<td>MET 101</td>
<td>INDUSTRIAL MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>MT 101B</td>
<td>BASIC MACHINING</td>
<td>4</td>
</tr>
<tr>
<td>PEA 103</td>
<td>WEIGHT TRAINING</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 201CL&amp;L</td>
<td>COLLEGE PHYSICS I LECTURE AND LAB</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 202CL&amp;L</td>
<td>COLLEGE PHYSICS II LECTURE AND LAB</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 203L&amp;L</td>
<td>ENGINEERING PHYSICS I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 204L&amp;L</td>
<td>ENGINEERING PHYSICS II</td>
<td>5</td>
</tr>
<tr>
<td>TECH 200</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>TECH 201A</td>
<td>APPLIED ALTERNATIVE AND RENEWABLE ENERGY</td>
<td>3</td>
</tr>
<tr>
<td>TECH 290CI</td>
<td>INTRODUCTION TO MECHATRONICS</td>
<td>3</td>
</tr>
<tr>
<td>W101A</td>
<td>COOPERATIVE INTERNSHIP</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BASIC WELDING</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 62**
## Electronics Technology Certificate

This curriculum is designed to prepare a student for employment as an electrical and electronics technician in manufacturing, commercial repair, or service industries. Upon completing this program students will be prepared to work as an Electronics Technician, Manufacturing Technician, Lab Technician, Electronic Assembler, or SMT Technician. Students planning to continue with an Associate’s Degree should consult with an MCC counselor.

<table>
<thead>
<tr>
<th>CERTIFICATE REQUIREMENTS</th>
<th>29-31 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTC 101 AL&amp;L</td>
<td>4</td>
</tr>
<tr>
<td>ELTR 101A</td>
<td>4</td>
</tr>
<tr>
<td>ELTR 102B</td>
<td>4</td>
</tr>
<tr>
<td>ELTR 112A</td>
<td>4</td>
</tr>
<tr>
<td>ELTR 202B</td>
<td>4</td>
</tr>
<tr>
<td>ELTC 160L&amp;L</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 220</td>
<td>3</td>
</tr>
<tr>
<td>Choose One (1) Course From</td>
<td>3-5</td>
</tr>
<tr>
<td>TMAT 101A TECHNICAL MATH I</td>
<td></td>
</tr>
<tr>
<td>TMAT 102A TECHNICAL MATH II</td>
<td></td>
</tr>
<tr>
<td>TMAT 201 TECHNICAL MATH III</td>
<td></td>
</tr>
<tr>
<td>MATH 109A COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td>MATH 141 PRECALCULUS</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 29-31**
Associate in Applied Science
Food Processing Technology

The food industry is the world’s largest industry. This multi-billion dollar industry employs many thousands of food processing specialists and scientists. There are more positions available for food scientists than graduates to fill them. The MCC curriculum, paired with courses in the Michigan State University Food Processing Certificate Program, prepares students for mid-level and managerial employment in food processing operations. Students will earn an MSU certificate while also working towards an associate degree. MSU Transfer Students: Students wishing to transfer to MSU as juniors must meet with the program coordinator during their first semester to alter general education courses to meet MSU requirements.

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS</th>
<th>22-25 CR. HRS.</th>
<th>REQUIRED ELECTIVES</th>
<th>3-6 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose Two (2) Courses From ........................................6</td>
<td>BUS 122.........................................................3</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td></td>
</tr>
<tr>
<td>ENG 101 ENGLISH COMPOSITION AND</td>
<td>BUS 125.........................................................3</td>
<td>SUPERVISION</td>
<td></td>
</tr>
<tr>
<td>BCOM 102 ADVANCED BUSINESS &amp; TECHNICAL COMMUNICATIONS</td>
<td>BUS 131.......................................................1</td>
<td>INTRO TO ENTREPRENEURSHIP</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>ELTC 101AL&amp;L.............................................4</td>
<td>ELECTRICITY-BASIC</td>
<td></td>
</tr>
<tr>
<td>ENG 101 ENGLISH COMPOSITION AND</td>
<td>ELTC 103.....................................................3</td>
<td>RESIDENTIAL WIRING</td>
<td></td>
</tr>
<tr>
<td>ENG 102 ENGLISH COMPOSITION</td>
<td>ELTC 150.....................................................3</td>
<td>INDUSTRIAL ELECTRICITY</td>
<td></td>
</tr>
<tr>
<td>BIOL 121 L&amp;L......................................................3</td>
<td>HP 101..........................................................3</td>
<td>HYDRAULICS/PNEUMATICS</td>
<td></td>
</tr>
<tr>
<td>PLANT BIOLOGY L&amp;L</td>
<td>ELTC 103.....................................................3</td>
<td>RESIDENTIAL WIRING</td>
<td></td>
</tr>
<tr>
<td>BUS 127..........................................................3</td>
<td>ELTC 150.....................................................3</td>
<td>INDUSTRIAL ELECTRICITY</td>
<td></td>
</tr>
<tr>
<td>HUMAN RELATIONS</td>
<td>HP 101..........................................................3</td>
<td>HYDRAULICS/PNEUMATICS</td>
<td></td>
</tr>
<tr>
<td>HE 110............................................................1</td>
<td>W 101A..........................................................3</td>
<td>BASIC WELDING</td>
<td></td>
</tr>
<tr>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td>QC 101..........................................................3</td>
<td>BASIC QUALITY CONTROL</td>
<td></td>
</tr>
<tr>
<td>Choose One (1) Course From ...........................................3-5</td>
<td>BIOL 207A.....................................................1</td>
<td>MICROBIOLOGY LAB</td>
<td></td>
</tr>
<tr>
<td>MATH 141 PRECALCULUS</td>
<td>PHIL 207.....................................................3</td>
<td>ENVIRONMENTAL ETHICS</td>
<td></td>
</tr>
<tr>
<td>TMAT 101A TECHNICAL MATH I</td>
<td>SPAN 101.....................................................4</td>
<td>BASIC SPANISH</td>
<td></td>
</tr>
<tr>
<td>TMAT 102A TECHNICAL MATH II</td>
<td>BIOL 109 L&amp;L..............................................4</td>
<td>FOOD TECHNOLOGY</td>
<td></td>
</tr>
<tr>
<td>TMAT 201 TECHNICAL MATH III</td>
<td>FS 101L&amp;L..................................................3</td>
<td>INTRO TO COMPUTER INFORMATION SYSTEMS</td>
<td></td>
</tr>
</tbody>
</table>
|CIS 120A......................................................3|INTRO TO FOOD SCIENCE AND PROCESS|TOTAL 62

(CONTINUED ON NEXT PAGE)
MSU Occupational Specialty Requirements Credits: 34

FOOD PROCESSING, TECHNOLOGY AND SAFETY – 34 CREDITS, 62 CREDIT HOUR DEGREE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABM 100</td>
<td>Decision Making in the Agri-Food Systems</td>
<td>3</td>
</tr>
<tr>
<td>AT 193</td>
<td>Agricultural Technology Clerkship</td>
<td>2</td>
</tr>
<tr>
<td>AT 293</td>
<td>Professional Internship</td>
<td>3</td>
</tr>
<tr>
<td>FSC 111</td>
<td>Foundational Concepts in Food Processing and Technology</td>
<td>3</td>
</tr>
<tr>
<td>FSC 112</td>
<td>Seminar in Food Processing, Technology and Safety</td>
<td>1</td>
</tr>
<tr>
<td>FSC 113</td>
<td>Basic Commodity Overview Food Processing and Technology</td>
<td>3</td>
</tr>
<tr>
<td>FSC 114</td>
<td>Food Processing and Technology Facilities Management</td>
<td>3</td>
</tr>
<tr>
<td>FSC 125</td>
<td>Food Processing and Technology Unit Operations</td>
<td>2</td>
</tr>
<tr>
<td>FSC 240</td>
<td>Applied Food Processing and Technology Microbiology</td>
<td>2</td>
</tr>
<tr>
<td>FSC 241</td>
<td>Safety Principles and Regulations in Food Process and Technology</td>
<td>3</td>
</tr>
<tr>
<td>FSC 242</td>
<td>Applied Food Processing and Technology Chemistry</td>
<td>2</td>
</tr>
</tbody>
</table>

Select two of the following four courses (4 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSC 230</td>
<td>Fruit and Vegetable Processing</td>
<td>2</td>
</tr>
<tr>
<td>FSC 231</td>
<td>Cereals Processing</td>
<td>2</td>
</tr>
<tr>
<td>FSC 232</td>
<td>Dairy Foods Processing</td>
<td>2</td>
</tr>
<tr>
<td>FSC 233</td>
<td>Muscle Foods Processing</td>
<td>2</td>
</tr>
</tbody>
</table>

Complete a minimum of 3 elective credits in the College of Agriculture and Natural Resources as approved by the program coordinator in the Institute of Agricultural Technology. Must send Muskegon CC an original MSU transcript with certificate noted for transfer acceptance.

MSU Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 290</td>
<td>Unmanned Aircraft FAA</td>
</tr>
<tr>
<td>HRT 221</td>
<td>Greenhouse Structures and Management Grape Production</td>
</tr>
<tr>
<td>HRT 234</td>
<td>Current Issues in Viticulture and Enology Greenhouses for Protected Cultivation</td>
</tr>
<tr>
<td>HRT 243</td>
<td>Organic Transplant Production Principles and Practices</td>
</tr>
<tr>
<td>HRT 253</td>
<td>Compost Production and Use Management</td>
</tr>
<tr>
<td>HRT 2xx</td>
<td>Vegetable Production and Management</td>
</tr>
<tr>
<td>AE 131</td>
<td>Water Resources Management</td>
</tr>
<tr>
<td>AT 291</td>
<td>Application of Animal Agriculture</td>
</tr>
<tr>
<td>AT 291</td>
<td>Michigan Pollination &amp; Bee Keeping</td>
</tr>
<tr>
<td>AT 291</td>
<td>General Ag Employee Management</td>
</tr>
<tr>
<td>HRT 232</td>
<td>Principles and practices of Grape Production</td>
</tr>
<tr>
<td>HRT 242</td>
<td>Passive Solar Greenhouses for Protected Cultivation</td>
</tr>
<tr>
<td>HRT 251</td>
<td>Organic Farming Principles and Practices</td>
</tr>
<tr>
<td>HRT 2xx</td>
<td>Tree Fruit Production and Management</td>
</tr>
<tr>
<td>ABM 130</td>
<td>Farm Management I</td>
</tr>
<tr>
<td>AT 291</td>
<td>Unmanned Aircraft FAA</td>
</tr>
<tr>
<td>AT 291</td>
<td>Agricultural Transportation</td>
</tr>
</tbody>
</table>
Food Science Certificate

The Food Science Certificate will prepare students to work mid-level and managerial positions in a food processing operation.

<table>
<thead>
<tr>
<th>CERTIFICATE REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 - 28 CR. HRS.</td>
</tr>
<tr>
<td>REQUIRED COURSES</td>
</tr>
<tr>
<td>ENG 101</td>
</tr>
<tr>
<td>TMAT 101A</td>
</tr>
<tr>
<td>TMAT 102A</td>
</tr>
<tr>
<td>HP 101</td>
</tr>
<tr>
<td>FS 101 L&amp;L</td>
</tr>
<tr>
<td>TECH 290CI</td>
</tr>
<tr>
<td>QC 101</td>
</tr>
</tbody>
</table>

**ELECTIVES 6 MINIMUM CR. HRS.**

Electives must be chosen from the following list or have departmental approval.

| BIOL 109L&L | FOOD TECHNOLOGY | 4 |
| BIOL 121LEC | PLANT BIOLOGY LECTURE | 3 |
| BIOL 121LAB | PLANT BIOLOGY LABORATORY | 1 |
| ENV 110L&L | ENVIRONMENTAL SCIENCE | 4 |
| W 101A | BASIC WELDING | 3 |
| ELTC 101AL&L | ELECTRICITY - BASIC | 4 |
| ELTC 150 | INDUSTRIAL ELECTRICITY | 3 |
| BUS 122 | PRINCIPLES OF MANAGEMENT | 3 |
| BUS 125 | SUPERVISION | 3 |
| PHIL 207 | ENVIRONMENTAL ETHICS | 3 |

**TOTAL 27-28**
Industrial Electricity Certificate

This curriculum is designed to prepare a student for employment as an industrial electrician or an industrial electrical worker. In order to become a licensed electrician students must complete an apprenticeship through an employer. Upon completing this program students will be prepared to work as an electrician, machine maintenance electrician, electrical control panel builder, or electrical machine builder. Students planning to continue with an associate’s degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS
28-30 CR. HRS.

ELTC 101AL&L.................................................................4
ELECTRICITY-BASIC
ELTC 103.................................................................3
RESIDENTIAL WIRING
ELTC 104A.................................................................3
BASIC INDUSTRIAL ROBOTS
ELTC 150.................................................................3
INDUSTRIAL ELECTRICITY
ELTC 152.................................................................3
NATIONAL ELECTRICAL CODE
ELTC 160L&L.................................................................3
PROGRAMMABLE CONTROLLERS
ELTC 220.................................................................3
ELECTRICAL TROUBLESHOOTING
HP 101.................................................................3

HYDRAULICS/ PNEUMATICS
Choose One (1) Course From ........................................ 3-5
TMAT 101A TECHNICAL MATH I
TMAT 102A TECHNICAL MATH II
TMAT 201 TECHNICAL MATH III
MATH 109A COLLEGE ALGEBRA
MATH 141 PRECALCULUS

TOTAL 28-30
# Manufacturing Technology Certificate

This curriculum is designed to educate and train personnel to fill supervisory and technical positions related in the manufacturing industry. Student will learn and apply manufacturing principles using industry leading technology. The program will emphasize process management, quality control, and skilled trades. Upon completing this program students will be prepared to work as a manufacturing technician, automation technician, production technician, or an advance manufacturing associate. Students planning to transfer should consult with an MCC counselor.

## CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 129A</td>
<td>INTRODUCTION TO TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>CAD 150</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HE 110</td>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td>1</td>
</tr>
<tr>
<td>HP 101</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELTC 101AL&amp;L</td>
<td>ELECTRICITY-BASIC</td>
<td>4</td>
</tr>
<tr>
<td>MET 101</td>
<td>INDUSTRIAL MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>MT 101B</td>
<td>BASIC MACHINING</td>
<td>4</td>
</tr>
<tr>
<td>QC 101</td>
<td>BASIC QUALITY CONTROL</td>
<td>3</td>
</tr>
<tr>
<td>W 101A</td>
<td>BASIC WELDING</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 101A</td>
<td>TECHNICAL MATH I</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
<td>2</td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109A</td>
<td>COLLEGE ALGEBRA</td>
<td>3</td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 30-32**

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.
Associate in Applied Science
Manufacuring Technology

This curriculum is designed to educate and train personnel to fill supervisory and technical positions related to industrial technology. Successful completion of the program leads to the degree of Associate in Applied Science. (Students may elect only those courses required to develop a particular skill without enrolling in the entire program of study that leads to a degree.) This degree is not designed for transfer.

**GENERAL EDUCATION REQUIREMENTS**

- **ENG 101** English Composition 3

Choose four (4) courses from:

- **ANTH 103** Cultural Diversity in Contemporary Society
- **BUS 127** Human Relations
- **BCOM 102** Advanced Business and Technical Communications
- **COM 201** Public Speaking
- **ENG 102** English Composition
- **ECON 101A** Principles of Macroeconomics
- **HUM 193** Introduction to Humanities
- **MATH 109A** College Algebra
- **MATH 141** Precalculus
- **PHIL 102** Principles of Logic
- **PHIL 201** Introduction to Ethics
- **SOC 101** Principles of Sociology
- **TMAT 101A** Technical Math
- **TMAT 102A** Technical Math II
- **TMAT 201** Technical Math III

**TECHNICAL-RELATED REQUIREMENTS**

- **CAD 110** Intro to Computer-Aided Drafting (2D) 3
- **ELTC 101AL&L** Electricity-Basic 4
- **MT 101B** Basic Machining 4
- **W 101A** Basic Welding 3

**REQUIRED ELECTIVES**

Electives must be chosen from the following list or have departmental approval.

- **AMT 129A** Introduction to Technology 3
- **BUS 125** Supervision 3
- **BUS 166** Quality Customer Service 3
- **CAD 135A** Engineering Graphics 3
- **CAD 210** Parametric Design I-Part Modeling 3
- **CAD 250** Introduction to SolidWorks 3D 3
- **CAD 254** SolidWorks II 4
- **CAD 255** Introduction to Siemens NX 3
- **CIS 101EW** Introduction to Electronic Spreadsheets 1
- **CIS 119PP** Introduction to Presentation Graphics 1
- **COM 101** Oral Communications 3
- **COM 201** Public Speaking 3
- **CSS 100A** College Success Seminar 3
- **ELTC 104A** Basic Industrial Robotics 3
- **ELTC 150** Industrial Electricity 3
- **ELTC 160L&L** Programmable Controllers 3
- **ENGR 105** Introduction to Engineering 4
- **HE 110** Industrial Safety and Workplace Training 1
- **HP 101** Hydraulics/Pneumatics 3
- **HP 201** Advanced Hydraulics 4
- **MATH 100A** Intermediate Algebra 4
- **MATH 161** Calculus I 4
- **MATH 162A** Calculus II 4
- **MET 101** Industrial Materials 3
- **MET 102** Basic Cast Metals 3
- **MET 201** Metallurgy 3
- **MT 102A** Intermediate Machining 3
- **MT 103A** Advanced Machining 3
- **MT 150** Machinery Handbook 3
- **MT 205A** N/C/N/C (Numerical Control/Computer Numerical) 3
- **MT 206A** 2-D CAD/CAM Computer-Aided Design/Machining 3

166 - 2023 - 2024 Muskegon Community College Catalog
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT 216</td>
<td>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>MT 218</td>
<td>3-AXIS CNC &amp; CMM</td>
<td>3</td>
</tr>
<tr>
<td>QC 101</td>
<td>BASIC QUALITY CONTROL</td>
<td>3</td>
</tr>
<tr>
<td>QC 105</td>
<td>QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL</td>
<td>3</td>
</tr>
<tr>
<td>TECH 201A</td>
<td>INTRODUCTION TO MECHATRONICS</td>
<td>3</td>
</tr>
<tr>
<td>TECH 290CI</td>
<td>COOPERATIVE INTERNSHIP</td>
<td>3</td>
</tr>
<tr>
<td>W 102A</td>
<td>GAS METAL ARC WELDING (MIG)</td>
<td>3</td>
</tr>
<tr>
<td>W 103A</td>
<td>GAS TUNGSTEN ARC WELDING (TIG)</td>
<td>3</td>
</tr>
<tr>
<td>W 105</td>
<td>SHIELDED METAL ARC WELDING (STICK)</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 60**
Associate in Applied Science
Machining Technology

This curriculum is designed to prepare the student for that highly diversified area engaged in the production of machined objects required for the assembly of the products of modern industry. Upon completing this program students will be prepared to work as a machinist, machine operator, CNC Operator, and a setup machinist. Students planning to transfer to a four-year college should consult with an MCC counselor.

### GENERAL EDUCATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>15-18 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION</td>
</tr>
<tr>
<td>HE 110</td>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
</tr>
<tr>
<td>Choose Two (2) Courses From</td>
<td>6-8</td>
</tr>
<tr>
<td>ANTH 103</td>
<td>CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</td>
</tr>
<tr>
<td>BCOM 102</td>
<td>ADVANCED BUS AND TECH COMMUNICATIONS</td>
</tr>
<tr>
<td>BUS 127</td>
<td>HUMAN RELATIONS</td>
</tr>
<tr>
<td>COM 201</td>
<td>PUBLIC SPEAKING</td>
</tr>
<tr>
<td>CSS 100A</td>
<td>COLLEGE SUCCESS SEMINAR</td>
</tr>
<tr>
<td>ECON 101A</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
</tr>
<tr>
<td>ENG 102</td>
<td>ENGLISH COMPOSITION</td>
</tr>
<tr>
<td>HUM 195</td>
<td>INTRODUCTION TO HUMANITIES</td>
</tr>
<tr>
<td>PHIL 102</td>
<td>PRINCIPLES OF LOGIC</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>INTRODUCTION TO ETHICS</td>
</tr>
<tr>
<td>PSYC 201</td>
<td>GENERAL PSYCHOLOGY</td>
</tr>
<tr>
<td>SOC 101</td>
<td>PRINCIPLES OF SOCIOLOGY</td>
</tr>
<tr>
<td>Choose Two (2) TMAT Courses or MATH 141</td>
<td>5-6</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS (RECOMMENDED FOR TRANSFER)</td>
</tr>
</tbody>
</table>

### MACHINING TECHNOLOGY REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>25 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT 101B</td>
<td>BASIC MACHINING</td>
</tr>
<tr>
<td>MT 102A</td>
<td>INTERMEDIATE MACHINING</td>
</tr>
<tr>
<td>MT 103A</td>
<td>ADVANCED MACHINING</td>
</tr>
<tr>
<td>MT 205A</td>
<td>N/C/CNC (COMPUTER NUMERICAL CONTROL)</td>
</tr>
<tr>
<td>MT 206A</td>
<td>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
</tr>
<tr>
<td>MT 216</td>
<td>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
</tr>
<tr>
<td>MT 218</td>
<td>5-AXIS CNC &amp; CMM</td>
</tr>
<tr>
<td>MT 222</td>
<td>MACHINING CAPSTONE</td>
</tr>
</tbody>
</table>

### REQUIRED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>16-19 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives must be chosen from the following list or have departmental approval.</td>
<td></td>
</tr>
<tr>
<td>AMT 129A</td>
<td>INTRODUCTION TO TECHNOLOGY</td>
</tr>
<tr>
<td>BUS 125</td>
<td>SUPERVISION</td>
</tr>
<tr>
<td>CAD 110</td>
<td>INTRO TO COMPUTER-AIDED DRAFTING (2D)</td>
</tr>
<tr>
<td>CAD 135A</td>
<td>ENGINEERING GRAPhICS</td>
</tr>
<tr>
<td>CAD 150</td>
<td>BLUEPRINT READING</td>
</tr>
<tr>
<td>CAD 210</td>
<td></td>
</tr>
<tr>
<td>CAD 220A</td>
<td>PARAMETrIC DESIGN I/PART MODELING</td>
</tr>
<tr>
<td>CAD 250</td>
<td>PARAMETrIC DESIGN II-ASSEMBlIES</td>
</tr>
<tr>
<td>CAD 255</td>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
</tr>
<tr>
<td>CSS 100A</td>
<td>INTRODUCTION TO SIEMENS NX</td>
</tr>
<tr>
<td>CSS 100A</td>
<td>COLLEGE SUCCESS SEMINAR</td>
</tr>
<tr>
<td>ELTC 101A</td>
<td>ELECTRICITY-BASIC</td>
</tr>
<tr>
<td>ENGR 105</td>
<td>INTRODUCTION TO ENGINEERING</td>
</tr>
<tr>
<td>HP 101</td>
<td>HYDRAULICS/PNEUMATICS</td>
</tr>
<tr>
<td>MATH 161</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>MATH 162A</td>
<td>CALCULUS II</td>
</tr>
<tr>
<td>MATH 162A</td>
<td></td>
</tr>
<tr>
<td>MET 102</td>
<td>BASIC CAST METALS</td>
</tr>
<tr>
<td>MET 201</td>
<td>METALLURGY</td>
</tr>
<tr>
<td>MT 150</td>
<td>MACHINERY HANDBOOK</td>
</tr>
<tr>
<td>MT 240</td>
<td>BASIC MACHINE REPAIR</td>
</tr>
<tr>
<td>PHYS 201A</td>
<td>COLLEGE PHYSICS I LECTURE AND LAB</td>
</tr>
<tr>
<td>QC 101</td>
<td>BASIC QUALITY CONTROL</td>
</tr>
<tr>
<td>TECH 201A</td>
<td>INTRODUCTION TO MECHATRONICS</td>
</tr>
<tr>
<td>TECH 290C</td>
<td>COOPERATIVE INTERNSHIP</td>
</tr>
</tbody>
</table>

(Continued on next page)
TMAT 101A ................................................................. 3
TECHNICAL MATH
W 101A ................................................................. 3
BASIC WELDING
W 102A ................................................................. 3
GAS METAL ARC WELDING (MIG)
W 103A ................................................................. 3
GAS TUNGSTEN ARC WELDING (TIG)
W 105 ................................................................. 3
SHEilded METAL ARC WELDING (STICK)

TOTAL 60
Machining Technology Certificate

This curriculum is designed to prepare the student for that highly diversified area engaged in the production of machined objects required for the assembly of the products of modern industry. Upon completing this program students will be prepared to work as a machinist, tool maker, die maker, lathe machinist, or CNC machinist. Students planning to continue with an associate’s degree should consult with an MCC counselor.

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 150</td>
<td>3</td>
</tr>
<tr>
<td>MET 101</td>
<td>3</td>
</tr>
<tr>
<td>MT 101B</td>
<td>4</td>
</tr>
<tr>
<td>MT 102A</td>
<td>3</td>
</tr>
<tr>
<td>MT 103A</td>
<td>3</td>
</tr>
<tr>
<td>MT 150</td>
<td>3</td>
</tr>
<tr>
<td>MT 205A</td>
<td>3</td>
</tr>
<tr>
<td>MT 206A</td>
<td>3</td>
</tr>
<tr>
<td>2-D CAD/CAM</td>
<td>3-4</td>
</tr>
</tbody>
</table>

**TOTAL 28-29**
Manufacturing Machine Repair Certificate
(Industrial Maintenance)

This curriculum is designed to provide students the necessary skills to build, install, troubleshoot, repair, and maintain industrial equipment used in the manufacturing industry. Students will study a variety of topics including automation, electricity, robotics, pneumatics, hydraulics, welding, and machining. Upon completing this program students will be prepared to work as machine repair technician, industrial machine mechanic, millwright, mechanical journeyperson, or machine maintenance technician. Students planning to continue with an associate’s degree should consult with an MCC counselor.

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 150</td>
<td>Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 101AL&amp;L</td>
<td>Electricity-Basic</td>
<td>4</td>
</tr>
<tr>
<td>HE 110</td>
<td>Industrial Safety and Workplace Training</td>
<td>1</td>
</tr>
<tr>
<td>HP 101</td>
<td>Hydraulics/Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>HP 201</td>
<td>Advanced Hydraulics</td>
<td>4</td>
</tr>
<tr>
<td>MT 101B</td>
<td>Basic Machining</td>
<td>4</td>
</tr>
<tr>
<td>MT 240</td>
<td>Basic Machine Repair</td>
<td>3</td>
</tr>
<tr>
<td>W 101A</td>
<td>Basic Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose One (1) Course From

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMAT 101A</td>
<td>Technical Math I</td>
<td>3-5</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>Technical Math II</td>
<td></td>
</tr>
<tr>
<td>TMAT 201</td>
<td>Technical Math III</td>
<td></td>
</tr>
<tr>
<td>MATH 109A</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 141</td>
<td>Precalculus</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 28-30**
## Manufacturing Automation Certificate

This curriculum is designed to prepare a student for employment as an entry level technician in manufacturing automation. This program is designed to give students hands-on skills in electricity, sensors, robotics, CAD, CNC, machining, and programmable logic controllers (PLC’s). Upon completing this program students will be prepared to work as an automation technician, electronics technician, manufacturing technician, or robotics technician. Students planning to transfer should consult with an MCC counselor. This is intended to go directly into the workforce.

### CERTIFICATE REQUIREMENTS 32-34 CR. HRS.

#### REQUIRED COURSES 16-18 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 110</td>
<td>INTRO TO COMPUTER-AIDED DRAFTING (2D)</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 101A &amp;L</td>
<td>ELECTRICITY-BASIC</td>
<td>4</td>
</tr>
<tr>
<td>ELTC 104A</td>
<td>BASIC INDUSTRIAL ROBOTS</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 160L &amp;L</td>
<td>PROGRAMMABLE CONTROLLERS</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose One (1) Course From

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMAT 101A</td>
<td>TECHNICAL MATH I</td>
<td></td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
<td></td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
<td></td>
</tr>
<tr>
<td>MATH 109A</td>
<td>COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS</td>
<td></td>
</tr>
</tbody>
</table>

#### OPTION 3: WELDING TRACK

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 101A</td>
<td>BASIC WELDING</td>
<td>3</td>
</tr>
<tr>
<td>W 102A</td>
<td>GAS METAL ARC WELDING (MIG)</td>
<td>3</td>
</tr>
<tr>
<td>W 103A</td>
<td>GAS TUNGSTEN ARC WELDING (TIG)</td>
<td>3</td>
</tr>
<tr>
<td>HP 101</td>
<td>HYDRAULICS/PNEUMATICS</td>
<td>4</td>
</tr>
<tr>
<td>HP 201</td>
<td>ADVANCED HYDRAULICS</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL 32-34

#### CHOOSE ONE (1) OPTION 16 CR.-HRS.

##### OPTION 1: PLC TRACK

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTC 150</td>
<td>INDUSTRIAL ELECTRICITY</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 203</td>
<td>ADVANCED PROGRAMMABLE CONTROLLERS</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 204A</td>
<td>ADVANCED INDUSTRIAL ROBOTS</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 210</td>
<td>INDUSTRIAL COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>ELTR 202B</td>
<td>INDUSTRIAL ELECTRONIC SYSTEMS</td>
<td>4</td>
</tr>
</tbody>
</table>

##### OPTION 2: CNC TRACK

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT 101B</td>
<td>BASIC MACHINING</td>
<td>4</td>
</tr>
<tr>
<td>MT 205A</td>
<td>N/C/CNC (COMPUTER NUMERICAL CONTROL)</td>
<td>3</td>
</tr>
<tr>
<td>MT 206A</td>
<td>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>MT 216</td>
<td>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose One (1) Course From

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 210</td>
<td>PARAMETRIC DESIGN I-PART MODELING</td>
<td></td>
</tr>
<tr>
<td>CAD 250</td>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
<td></td>
</tr>
</tbody>
</table>
## Mechatronics Certificate

This certificate program provides students with the foundation skills necessary to pursue a career in STEM. This program is designed to give students exposure to a variety of careers including; Mechanical Engineer, Electrical Engineer, Manufacturing Engineer, Electrician, Automation Technician, CAD/CNC, Electronics Technician, Machinist, Industrial Maintenance, and Materials Technology. Students will learn basic engineering skills required to apply mathematics to solve problems, as well as hands-on skills necessary to begin a career in skilled trades. Upon completing this program students will have the skills necessary to go to work as a technician, begin a career in skills trades as an apprentice, and/or continue their education toward an Associate’s Degree or Bachelor’s Degree. This program is offered for full-time and part-time, day or night, as well as early college and dual enrollment students.

### CERTIFICATE REQUIREMENTS

#### REQUIRED COURSES  17-19 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 110</td>
<td>INTRO TO COMPUTER-AIDED DRAFTING (2D)</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 101AL&amp;L</td>
<td>BASIC ELECTRICITY</td>
<td>4</td>
</tr>
<tr>
<td>HE 110</td>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td>1</td>
</tr>
<tr>
<td>TECH 201A</td>
<td>INTRODUCTION TO MECHATRONICS</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose One (1) Course From:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 210</td>
<td>PARAMETRIC DESIGN I-PART MODELING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 250</td>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose One (1) Course From:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMAT 101A</td>
<td>TECHNICAL MATH I</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109A</td>
<td>COLLEGE ALGEBRA</td>
<td>3</td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS</td>
<td>3</td>
</tr>
</tbody>
</table>

### REQUIRED ELECTIVES

#### 3-4 CR. HRS

Electives must be chosen from the following list or have departmental approval.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT129A</td>
<td>INTRODUCTION TO TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 105</td>
<td>INTRODUCTION TO ENGINEERING</td>
<td>4</td>
</tr>
<tr>
<td>CSS 100A</td>
<td>COLLEGE SUCCESS SEMINAR</td>
<td>3</td>
</tr>
<tr>
<td>HP 101</td>
<td>HYDRAULICS/PNEUMATICS</td>
<td>4</td>
</tr>
<tr>
<td>MATH 161</td>
<td>CALCULUS I</td>
<td>4</td>
</tr>
<tr>
<td>MT 101B</td>
<td>BASIC MACHINING</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 20-23
Patternmakers Certificate

This curriculum is designed to prepare the student for entry level work as a foundry patternmaker. Students will apply CAD, CNC, machining, and woodworking skills to create molds used in casting metal foundries. Upon completing this program students will be prepared to work as a foundry patternmaker, model maker, or foundry technician. Students planning to continue with an associate’s degree should consult with an MCC counselor.

**CERTIFICATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 110</td>
<td>INTRODUCTION TO DRAFTING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 150</td>
<td>BLUEPRINT READING</td>
<td>3</td>
</tr>
<tr>
<td>MT 101B</td>
<td>BASIC MACHINING</td>
<td>4</td>
</tr>
<tr>
<td>MT 205A</td>
<td>NC/CNC (NUMERICAL CONTROL/COMPUTER NUMERICAL CONTROL)</td>
<td>3</td>
</tr>
<tr>
<td>MT 206A</td>
<td>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>MT 216</td>
<td>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>MT 102</td>
<td>BASIC CAST METALS</td>
<td>3</td>
</tr>
<tr>
<td>CAD 210</td>
<td>PARAMETRIC DESIGN I PART MODELING</td>
<td>3</td>
</tr>
<tr>
<td>CAD 250</td>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
<td></td>
</tr>
<tr>
<td>MT 218</td>
<td>5-AXIS CNC &amp; CMM</td>
<td>3</td>
</tr>
<tr>
<td>MT 222</td>
<td>MACHINING CAPSTONE</td>
<td>3-5</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
<td></td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
<td></td>
</tr>
<tr>
<td>MATH 109A</td>
<td>COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 31-33**
Associate in Applied Science  
Engineering Technology

This curriculum is designed to prepare a student for entry-level engineering and technical positions related to industry and technology. This degree is designed to prepare graduates for entry-level work in the field of Engineering and/or to transfer to a four-year institution for continuing engineering study. Upon completing this program students will be prepared for a career path as Process Engineer, Quality Engineer, Systems Engineer, Plant Engineer, or Manufacturing Engineer. Students planning to transfer to a four-year college should consult with an MCC Counselor.

**GENERAL EDUCATION REQUIREMENTS**  
17-22 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS</td>
<td>5</td>
</tr>
<tr>
<td>Choose Three (3) Courses From:</td>
<td>ART 100A, ART 198, BCOM 102, BUS 127, COM 201, CSS 100A, ENG 102, HUM 195, PHIL 101, PHIL 202, PHIL 295, SOC 101, SOC 202A</td>
<td>9</td>
</tr>
</tbody>
</table>

**ELECTIVES**  
(AS NEEDED TO REACH 60 CREDITS)

**ENGINEERING TECHNOLOGY-RELATED REQUIREMENTS**  
10 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 201CL&amp;L</td>
<td>COLLEGE PHYSICS I LECTURE AND LAB</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 202CL&amp;L</td>
<td>ENGINEERING PHYSICS I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 204CL&amp;L</td>
<td>COLLEGE PHYSICS II LECTURE AND LAB</td>
<td></td>
</tr>
<tr>
<td>PHYS 203CL&amp;L</td>
<td>ENGINEERING PHYSICS II</td>
<td></td>
</tr>
</tbody>
</table>

**REQUIRED ELECTIVES**  
12-15 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 129A</td>
<td>INTRODUCTION TO TECHNOLOGY</td>
<td></td>
</tr>
<tr>
<td>ANTH 103</td>
<td>CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</td>
<td></td>
</tr>
<tr>
<td>ANTH 105D</td>
<td>INTRODUCTION TO PHYSICAL ANTHROPOLOGY/ARCHAEOLOGY</td>
<td></td>
</tr>
<tr>
<td>CAD 110</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING (2D)</td>
<td></td>
</tr>
<tr>
<td>CAD 210</td>
<td>PARAMETRIC DESIGN I-PART MODELING</td>
<td></td>
</tr>
<tr>
<td>CAD 250</td>
<td>INTRODUCTION TO SOLIDWORKS 3D</td>
<td></td>
</tr>
</tbody>
</table>

**CHOOSE ONE (1) OPTION**  
19-21 CR. HRS.

**OPTION 1: ENGINEERING TRACK**  
21 CR. HRS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101LEC &amp; CHEM 101A</td>
<td>GENERAL AND INORGANIC CHEMISTRY L&amp;L</td>
<td>5</td>
</tr>
<tr>
<td>MATH 161</td>
<td>CALCULUS I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 162A</td>
<td>CALCULUS II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 283</td>
<td>CALCULUS III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 295</td>
<td>DIFFERENTIAL EQUATIONS</td>
<td>4</td>
</tr>
</tbody>
</table>

*ENGINEERING TRACK IS RECOMMENDED FOR STUDENTS WISHING TO PURSUE A DEGREE IN ENGINEERING. STUDENTS PLANNING TO TRANSFER TO A FOUR-YEAR COLLEGE SHOULD CONSULT WITH AN MCC COUNSELOR.*
OPTION 2: FERRIS STATE UNIVERSITY
ENGINEERING TECHNOLOGY TRACK  20 CR HRS.

CAD 250  ................................................................. 3
INTRODUCTION TO SOLIDWORKS
ELTC 101A & L ....................................................... 4
ELECTRICITY - BASIC
HP 101 ..................................................................... 3
HYDRAULICS/PNEUMATICS
MATH 161 ................................................................. 4
CALCULUS I
MET 101 ................................................................. 3
INDUSTRIAL MATERIALS
MET 201 ................................................................. 3
METALLURGY

*Ferris State University Engineering Technology Track allows students to transfer into the following programs at FSU:
• Industrial Technology and Management
• Manufacturing Engineering Technology
• Product Design Engineering Technology

OPTION 3: WESTERN MICHIGAN UNIVERSITY
ENGINEERING TECHNOLOGY TRACK  19 CR HRS.

CAD 210 ................................................................. 3
PARAMETRIC DESIGN I-PART MODELING
CHEM 101 LEC & CHEM 101A .............................. 5
GENERAL & INORGANIC CHEMISTRY L & L
ELTC 101A & L ....................................................... 4
ELECTRICITY - BASIC
MATH 161 ................................................................. 4
CALCULUS I
MET 201 ................................................................. 3
METALLURGY

*Western Michigan University Engineering Technology Track allows students to transfer into the following programs at WMU:
• Engineering Design Technology
• Engineering Management Technology
• Manufacturing Engineering Technology

TOTAL 60
Quality Assurance Certificate

This curriculum is designed to educate and train personnel to fill technician positions related to quality assurance in the manufacturing industry.

<table>
<thead>
<tr>
<th>CERTIFICATE REQUIREMENTS</th>
<th>24-27 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 129A</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO TECHNOLOGY</td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td></td>
</tr>
<tr>
<td>CAD 150</td>
<td>3</td>
</tr>
<tr>
<td>BLUEPRINT READING</td>
<td></td>
</tr>
<tr>
<td>MET 101</td>
<td>3</td>
</tr>
<tr>
<td>INDUSTRIAL MATERIALS</td>
<td></td>
</tr>
<tr>
<td>QC 101</td>
<td>3</td>
</tr>
<tr>
<td>BASIC QUALITY CONTROL</td>
<td></td>
</tr>
<tr>
<td>QC 105</td>
<td>3</td>
</tr>
<tr>
<td>QUALITY AND PRODUCTIVITY USING</td>
<td></td>
</tr>
<tr>
<td>SPC-STATISTICAL PROCESS CONTROL</td>
<td></td>
</tr>
<tr>
<td>Choose Two (2) Courses From</td>
<td>6-9</td>
</tr>
<tr>
<td>TMAT 101A</td>
<td>TECHNICAL MATH I</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
</tr>
<tr>
<td>MATH 115A</td>
<td>PROBABILITY AND STATISTICS</td>
</tr>
<tr>
<td>MATH 215A</td>
<td>PROBABILITY AND STATISTICS FOR</td>
</tr>
<tr>
<td></td>
<td>ENGINEERING</td>
</tr>
<tr>
<td>MATH 109A</td>
<td>COLLEGE ALGEBRA</td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS</td>
</tr>
</tbody>
</table>

TOTAL 24-27
Associate in Applied Science
Urban Forest Management

Employment and career opportunities continue to expand for those who have training and educational preparation in Urban Forest Management. In response to agency and industry needs, Michigan State University is partnering with Muskegon Community College (MCC) to offer a combined program, which enables students to complete an MSU Institute of Agricultural Technology certificate in Urban Forest Management and an Associate Degree at MCC concurrently. The Urban Forest Management Program prepares graduates for a wide range of employment and career choices in the field. MSU Transfer Students: Students wishing to transfer to MSU as juniors must meet with the program coordinator during their first semester to alter general education courses to meet MSU requirements.

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS</th>
<th>24-26 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>ENG 101</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 121 L&amp;L</td>
<td>BIOL 121 L&amp;L</td>
</tr>
<tr>
<td>PLANT BIOLOGY L&amp;L</td>
<td>4</td>
</tr>
<tr>
<td>ENV 110 L&amp;L</td>
<td>ENV 110 L&amp;L</td>
</tr>
<tr>
<td>ENVIRONMENTAL SCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>Choose one (1) Course From</td>
<td>Choose one (1) Course From</td>
</tr>
<tr>
<td>BUS 125 SUPERVISION</td>
<td>3</td>
</tr>
<tr>
<td>BUS 122 PRINCIPLES OF MANAGEMENT</td>
<td>BUS 122 PRINCIPLES OF MANAGEMENT</td>
</tr>
<tr>
<td>CIS 120A</td>
<td>CIS 120A</td>
</tr>
<tr>
<td>INTRODUCTION TO COMPUTER INFORMATION SYSTEMS</td>
<td>INTRODUCTION TO COMPUTER INFORMATION SYSTEMS</td>
</tr>
<tr>
<td>GEOG 251</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTIO TO GIS</td>
<td>INTRODUCTIO TO GIS</td>
</tr>
<tr>
<td>HE 110 INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td>HE 110 INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
</tr>
<tr>
<td>Choose One (1) Course From</td>
<td>Choose One (1) Course From</td>
</tr>
<tr>
<td>MATH 141 COLLEGE ALGEBRA</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 101A TECHNICAL MATH I</td>
<td>TMAT 101A TECHNICAL MATH I</td>
</tr>
<tr>
<td>TMAT 102A TECHNICAL MATH II</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 201 TECHNICAL MATH III</td>
<td>TMAT 201 TECHNICAL MATH III</td>
</tr>
<tr>
<td>TOTAL 62-64</td>
<td>TOTAL 62-64</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MSU OCCUPATIONAL SPECIALTY REQUIREMENTS</th>
<th>38</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 293 PROFESSIONAL INTERNSHIP</td>
<td>3</td>
</tr>
<tr>
<td>CSS 143 INTRODUCTION TO SOIL SCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>ENT 110 INTRODUCTION TO CLIMBING AND AERIAL TREE WORK</td>
<td>ENT 110 INTRODUCTION TO CLIMBING AND AERIAL TREE WORK</td>
</tr>
<tr>
<td>FOR 111 CAREER DEVELOPMENT IN URBAN AND COMMUNITY FORESTRY</td>
<td>FOR 111 CAREER DEVELOPMENT IN URBAN AND COMMUNITY FORESTRY</td>
</tr>
<tr>
<td>FOR 112 URBAN TREE CARE EQUIPMENT AND WORKER SAFETY</td>
<td>FOR 112 URBAN TREE CARE EQUIPMENT AND WORKER SAFETY</td>
</tr>
<tr>
<td>FOR 113 METHODS OF ENGAGEMENT IN URBAN AND COMMUNITY FORESTRY</td>
<td>FOR 113 METHODS OF ENGAGEMENT IN URBAN AND COMMUNITY FORESTRY</td>
</tr>
<tr>
<td>FOR 114 URBAN TREETOPS音响</td>
<td>FOR 114 URBAN TREETOPS音响</td>
</tr>
<tr>
<td>FOR 115 FORESTRY FIELD METHODS</td>
<td>2</td>
</tr>
<tr>
<td>FOR 116 URBAN FORESTRY INFORMATION TECHNOLOGY</td>
<td>FOR 116 URBAN FORESTRY INFORMATION TECHNOLOGY</td>
</tr>
<tr>
<td>FOR 211 CAPSTONE EXPERIENCE IN URBAN AND COMMUNITY FORESTRY</td>
<td>FOR 211 CAPSTONE EXPERIENCE IN URBAN AND COMMUNITY FORESTRY</td>
</tr>
<tr>
<td>FOR 212 CREW LEADERSHIP &amp; MANAGEMENT IN ARBORICULTURE</td>
<td>FOR 212 CREW LEADERSHIP &amp; MANAGEMENT IN ARBORICULTURE</td>
</tr>
<tr>
<td>FOR 213 URBAN TREE CARE PRACTICUM</td>
<td>2</td>
</tr>
<tr>
<td>FOR 214 LANDSCAPE PLANTS I</td>
<td>3</td>
</tr>
<tr>
<td>FOR 215 LANDSCAPE MAINTENANCE</td>
<td>2</td>
</tr>
<tr>
<td>FOR 216 LANDSCAPE MAINTENANCE</td>
<td>2</td>
</tr>
<tr>
<td>FOR 217 FUNDAMENTALS OF APPLIED PLANT PATHOLOGY</td>
<td>FOR 217 FUNDAMENTALS OF APPLIED PLANT PATHOLOGY</td>
</tr>
</tbody>
</table>
Associate in Applied Science
Welding Technology

This program is designed to provide basic skills necessary to pursue a career in welding. Students will learn skills dealing with the fabrication of metal products from rolled, stamped, forged or cast shapes. Curriculum will also focus on the type of metal, position of weldments, and use of structural shapes in a manner similar to that used in industrial processing. Upon completing this program students will be prepared to work as a welding operator, welding technician, welding maintenance technician or welding automation technician. Students planning to transfer to a four-year college should consult with an MCC counselor.

GENERAL EDUCATION REQUIREMENTS 15-18 CR. HRS.
ENG 101 ENGLISH COMPOSITION ..................................................3
Choose Four (4) Courses From ........................................ 12-15
ANTH 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY ........................................................................3
BUS 127 HUMAN RELATIONS .....................................................3
B.COM 102 ADVANCED BUS AND TECHNOLOGY COMMUNICATIONS ................................................3
COM 201 PUBLIC SPEAKING .......................................................3
ENG 102 ENGLISH COMPOSITION ..............................................3
ECON 101A PRINCIPLES OF MACROECONOMICS ..........................3
HUM 195 INTRODUCTION TO HUMANITIES ..................................3
MATH 109A COLLEGE ALGEBRA ..............................................3
MATH 141 PRECALCULUS ..........................................................3
PHIL 102 PRINCIPLES OF LOGIC ............................................3
PHIL 202 INTRODUCTION TO ETHICS .....................................3
PSYC 201 GENERAL PSYCHOLOGY .......................................3
SOC 101 PRINCIPLES OF SOCIOLOGY ....................................3
TMAT 101A TECHNICAL MATH I ..........................................3
TMAT 102A TECHNICAL MATH II ........................................3
TMAT 201 TECHNICAL MATH III ..........................................3
ELTC 101A&L ...........................................................................4
ELECTRICITY-BASIC ...............................................................4
MET 201 .................................................................................3
METALLURGY .................................................................3
MT 101B .................................................................................4
BASIC MACHINING .................................................................4
ENGR 105 .................................................................................4
INTRODUCTION TO ENGINEERING ........................................4
PHYS 201&L .............................................................................5
COLLEGE PHYSICS I LECTURE AND LAB .................................5

REQUIRED ELECTIVES 8-12 CR. HRS.
Electives must be chosen from the following list or have departmental approval.
ACC 201 ..................................................................................4
PRINCIPLES OF ACCOUNTING I .................................................4
AMT 129A ................................................................................3
INTRODUCTION TO TECHNOLOGY ................................................3
BUS 125 ..................................................................................3
SUPERVISION .................................................................3
BUS 161A ................................................................................3
EFFECTIVE SELLING .................................................................3
CAD 135A ................................................................................3
ENGINEERING GRAPHICS .......................................................3
CAD 100 ..................................................................................3
PARAMETRIC DESIGN I - PART MODELING ................................3
CAD 250 ..................................................................................3
INTRODUCTION TO SOLIDWORKS 3D ....................................3
CS 100A ..................................................................................3
COLLEGE SUCCESS SEMINAR ................................................3
COM 201 ..................................................................................3
PUBLIC SPEAKING .................................................................3
ELTC 150 ................................................................................3
INDUSTRIAL ELECTRICITY .......................................................3
ELTC 204A ...............................................................................3
ADVANCED INDUSTRIAL ROBOTS ..........................................3
ELTC 220 ...............................................................................3
ELECTRICAL TROUBLESHOOTING .........................................3
HE 110 ....................................................................................1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING ..................3
HP 101 ....................................................................................3
HYDRAULICS/PNEUMATICS ....................................................3
HP 201 ....................................................................................4
ADVANCED HYDRAULICS ........................................................4

WELDING TECHNOLOGY REQUIREMENTS 24 CR. HRS.
ELTC 104A ...............................................................................3
BASIC INDUSTRIAL ROBOTS ......................................................3
W 101A ....................................................................................3
BASIC WELDING .................................................................3
W 102A ....................................................................................3
GAS METAL ARC WELDING (MIG) .........................................3
W 103A ....................................................................................3
GAS TUNGSTEN ARC WELDING (TIG) .....................................3
W 105 ....................................................................................3
SHIELDED METAL ARC WELDING (STICK) ...........................3
W 201 ....................................................................................3
STRUCTURAL WELDING .........................................................3
W 202A ....................................................................................3
PIPE WELDING .........................................................................3
W 206 ....................................................................................3
METAL FABRICATION ............................................................3

TECHNICAL-RELATED REQUIRED ELECTIVES 11-12 CR. HRS.
CAD 110 ..................................................................................3
INTRO TO COMPUTER-AIDED DRAFTING (2D) ......................3
CAD 150 ..................................................................................3
BLUEPRINT READING ..............................................................3

(CONTINUED ON NEXT PAGE)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 161</td>
<td>CALCULUS I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 162A</td>
<td>CALCULUS II</td>
<td>4</td>
</tr>
<tr>
<td>MET 101</td>
<td>INDUSTRIAL MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>MET 102</td>
<td>BASIC CAST METALS</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 101A</td>
<td>TECHNICAL MATH</td>
<td>4</td>
</tr>
<tr>
<td>TECH 201A</td>
<td>INTRODUCTION TO MECHATRONICS</td>
<td>3</td>
</tr>
<tr>
<td>TECH 290CI</td>
<td>COOPERATIVE INTERNSHIP</td>
<td>3</td>
</tr>
<tr>
<td>QC 101</td>
<td>BASIC QUALITY CONTROL</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL 62**
Welding Technology Certificate

This program is designed to provide basic skills necessary to pursue a career in welding. Students will learn skills dealing with the fabrication of metal products from rolled, stamped, forged or cast shapes. Curriculum will also focus on the type of metal, position of weldments, and use of structural shapes in a manner similar to that used in industrial processing. Upon completing this program students will be prepared to work as a welding operator, welding technician, or welding maintenance technician. This program is offered for full-time and part-time, day or night, as well as early college and dual enrollment students. Students planning to continue with an associate’s degree should consult with an MCC counselor.

<table>
<thead>
<tr>
<th>CERTIFICATE REQUIREMENTS</th>
<th>24-26 CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 150</td>
<td>3</td>
</tr>
<tr>
<td>CAD 150</td>
<td>Blueprint Reading</td>
</tr>
<tr>
<td>W 101A</td>
<td>3</td>
</tr>
<tr>
<td>W 101A</td>
<td>Basic Welding</td>
</tr>
<tr>
<td>W 102A</td>
<td>3</td>
</tr>
<tr>
<td>W 102A</td>
<td>Gas Metal Arc Welding (MIG)</td>
</tr>
<tr>
<td>W 103A</td>
<td>3</td>
</tr>
<tr>
<td>W 103A</td>
<td>Gas Tungsten Arc Welding (TIG)</td>
</tr>
<tr>
<td>W 105</td>
<td>3</td>
</tr>
<tr>
<td>W 105</td>
<td>Shielded Metal Arc Welding (Stick)</td>
</tr>
<tr>
<td>W 201</td>
<td>3</td>
</tr>
<tr>
<td>W 201</td>
<td>Structural Welding</td>
</tr>
<tr>
<td>W 202A</td>
<td>3</td>
</tr>
<tr>
<td>W 202A</td>
<td>Pipe Welding</td>
</tr>
</tbody>
</table>

Choose One (1) Course From ........................................ 3-5

<table>
<thead>
<tr>
<th>Course</th>
<th>3-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMAT 101A</td>
<td>TECHNICAL MATH I</td>
</tr>
<tr>
<td>TMAT 102A</td>
<td>TECHNICAL MATH II</td>
</tr>
<tr>
<td>TMAT 201</td>
<td>TECHNICAL MATH III</td>
</tr>
<tr>
<td>MATH 109A</td>
<td>COLLEGE ALGEBRA</td>
</tr>
<tr>
<td>MATH 141</td>
<td>PRECALCULUS</td>
</tr>
</tbody>
</table>

TOTAL 24-26
Wind & Solar Certificate

The Wind and Solar Certificate focuses on the installation of wind and solar electric generation equipment designed for use in residential and light commercial environments. This segment of the industry has received statewide acceptance by local communities. As the technology advances payback periods are decreasing thus encouraging increased use of these alternative and renewable power generation technologies. Upon completing this program students will be prepared to work as a renewable energy technician, renewable energy installer, solar energy technician, or a wind technician. Students planning to continue with an associate’s degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS 29-31 CR. HRS.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARE 115 ..............................................................</td>
<td>3</td>
</tr>
<tr>
<td>WIND TURBINE AND SOLAR ARRAY INSTALLATION</td>
<td></td>
</tr>
<tr>
<td>ELTC 101A L&amp;L ......................................................</td>
<td>4</td>
</tr>
<tr>
<td>ELECTRICITY-BASIC</td>
<td></td>
</tr>
<tr>
<td>ELTC 103 ..................................................................</td>
<td>3</td>
</tr>
<tr>
<td>RESIDENTIAL WIRING</td>
<td></td>
</tr>
<tr>
<td>ELTC 150 ..................................................................</td>
<td>3</td>
</tr>
<tr>
<td>INDUSTRIAL ELECTRICITY</td>
<td></td>
</tr>
<tr>
<td>ELTC 152 ..................................................................</td>
<td>3</td>
</tr>
<tr>
<td>NATIONAL ELECTRIC CODE</td>
<td></td>
</tr>
<tr>
<td>ELTC 160L&amp;L ................................................................</td>
<td>3</td>
</tr>
<tr>
<td>PROGRAMMABLE CONTROLLERS</td>
<td></td>
</tr>
<tr>
<td>ELTC 220 ..................................................................</td>
<td>3</td>
</tr>
<tr>
<td>ELECTRICAL TROUBLESHOOTING</td>
<td></td>
</tr>
<tr>
<td>HE 110 .......................................................................</td>
<td>1</td>
</tr>
<tr>
<td>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</td>
<td></td>
</tr>
<tr>
<td>TECH 200 ....................................................................</td>
<td>3</td>
</tr>
<tr>
<td>APPLIED ALTERNATIVE AND RENEWABLE ENERGY</td>
<td></td>
</tr>
</tbody>
</table>

Choose One (1) Course From ........................................ 3-5

- TMAT 101A   TECHNICAL MATH I
- TMAT 102A   TECHNICAL MATH II
- TMAT 201    TECHNICAL MATH III
- MATH 109A   COLLEGE ALGEBRA
- MATH 141    PRECALCULUS

TOTAL 29-31
ASSOCIATE IN GENERAL STUDIES (AGS) DEGREE
Not Intended for Transfer

The AGS degree is designed for students interested in self-enrichment who are not following a specific occupational or transfer program. Courses may be selected to suit individual student goals. Students should consult with a counselor for further information. A minimum of 60 credit hours with a minimum cumulative 2.0 GPA is required for the AGS Degree. Courses numbered below 100 do not count toward the AGS. Any course can be used ONLY ONCE in any category. The same course cannot be used to satisfy two groups. Student must complete at least 30 credits, or the last 15 credits, at Muskegon Community College to meet the degree residency requirement.

### Associate in General Studies
Minimum – 60 credits

<table>
<thead>
<tr>
<th>Category</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Communication - 101, 102, 107, 201</td>
</tr>
<tr>
<td></td>
<td>English – 101, 102, any 200-level English course except 234D</td>
</tr>
<tr>
<td></td>
<td>Personal, Social, and Cultural Awareness - 3 credits</td>
</tr>
<tr>
<td></td>
<td>Anthropology - 103, 110</td>
</tr>
<tr>
<td></td>
<td>Art - 198, 199, 202</td>
</tr>
<tr>
<td></td>
<td>Business - 127</td>
</tr>
<tr>
<td></td>
<td>Economics - any</td>
</tr>
<tr>
<td></td>
<td>English - 200A, 201A, 205, 206, 207, 210, 211, 213, 218A, 225, 226, 227, 228, 231</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>Business – 126</td>
</tr>
<tr>
<td></td>
<td>Math – Any 100 level or higher Math course</td>
</tr>
<tr>
<td></td>
<td>Technical Math – any</td>
</tr>
<tr>
<td></td>
<td>English - 101, 102, any 200-level English course except 234D</td>
</tr>
<tr>
<td></td>
<td>Foreign Language - any</td>
</tr>
<tr>
<td></td>
<td>Geography - 104, 105</td>
</tr>
<tr>
<td></td>
<td>History - any</td>
</tr>
<tr>
<td></td>
<td>Humanities - any</td>
</tr>
<tr>
<td></td>
<td>Music - 103A</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>Anthropology – 105D</td>
</tr>
<tr>
<td></td>
<td>Astronomy – any</td>
</tr>
<tr>
<td></td>
<td>Biology – any</td>
</tr>
<tr>
<td></td>
<td>Chemistry – any</td>
</tr>
<tr>
<td></td>
<td>Computer Information Systems – any</td>
</tr>
<tr>
<td></td>
<td>Geography – 101A, 215</td>
</tr>
<tr>
<td></td>
<td>Geology – any</td>
</tr>
<tr>
<td></td>
<td>Introduction to Technology (AMT) 129A</td>
</tr>
<tr>
<td></td>
<td>Physical Science – any</td>
</tr>
<tr>
<td></td>
<td>Physics – any</td>
</tr>
<tr>
<td></td>
<td>Ethical Reasoning and Creativity - 6 credits</td>
</tr>
<tr>
<td></td>
<td>Communication – 203</td>
</tr>
<tr>
<td></td>
<td>Dance – any</td>
</tr>
<tr>
<td></td>
<td>English – 216, 223</td>
</tr>
<tr>
<td></td>
<td>Music – any</td>
</tr>
<tr>
<td></td>
<td>Philosophy – 101, 102, 104, 202, 204, 205, 207</td>
</tr>
<tr>
<td></td>
<td>Theater - any</td>
</tr>
<tr>
<td></td>
<td>Option 1:</td>
</tr>
<tr>
<td></td>
<td>One credit must be from the following:</td>
</tr>
<tr>
<td></td>
<td>Physical Education - 101A, 103, 104A, 118, 201</td>
</tr>
<tr>
<td></td>
<td>One credit must be from any other Physical Education or Dance course</td>
</tr>
<tr>
<td></td>
<td>Option 2:</td>
</tr>
<tr>
<td></td>
<td>May replace option 1 with PEA 121</td>
</tr>
<tr>
<td></td>
<td>Electives - 35 credits of student’s choice</td>
</tr>
</tbody>
</table>

2023 - 2024 Muskegon Community College Catalog - 183
Higher Education Partnership Programs

In addition to the many traditional transfer opportunities available to MCC students, the college also partners with three universities in unique programs allowing occupational students to transfer to a high quality baccalaureate program. In all transfer programs, be sure to see an MCC counselor for details.

Ferris State University
(www.ferris.edu/muskegon)

Ferris State University partners with MCC to provide opportunities to complete a bachelor’s degree locally and affordably. Some programs allow students to take up to 90 credits at MCC and 30 credits at Ferris to earn their bachelor’s degree. These programs are available through a combination of community college courses and Ferris State University courses delivered in Grand Rapids and/or online coursework.

Business Administration
This program prepares students for the rapidly changing nature of the work environment in business, government, and other nonprofit organizations. The program is designed to equip graduates not only for entry-level positions, but also for advancement as well. Building upon a core of business courses, the program features a tight sequence of major courses; however, the program also provides the flexibility to specialize in an area of interest for the student.

Business Administration—Professional Track
The Business Administration—Professional Track provides a degree completion program in Business Administration for students who have prior coursework containing a professional or occupational emphasis (i.e. Accounting, Human Resources, Marketing, Cosmetology and many others).

Computer Information Systems
Computers and information systems are essential in many aspects of business, industry, and life. Individual business departments, corporations, or multi-national enterprises need professional, highly skilled computer systems problem-solvers to keep them operating at peak efficiency. The CIS curriculum provides a broad understanding of core business functions, competency in computer programming, knowledge of information technology infrastructure, and a sound foundation in systems analysis and design.

Computer Information Technology
This curriculum prepares you for several industry certifications such as: CompTIA’s: A+, Network+, Linux+, Security+, and Microsoft’s System Administration Certification (MCSA). Transfer your MCC courses and complete your bachelor’s degree with a combination of Ferris courses in Grand Rapids and/or online.

Criminal Justice
This Generalist option prepares the student to seek federal, state and/or local Criminal Justice agency employment or admission to law school or graduate school, and it gives students an education with a broad focus in Criminal Justice. The program offers small class sizes, usually between 15 to 30 students, and our degreed faculty members have extensive Criminal Justice experience and utilize a pragmatic approach to prepare students for a career in Criminal Justice. The most common positions for graduates of this program are: police officer, corrections officer, community correction officer, probation officer, detective, federal agent, and investigator for a multitude of public and private agencies and/or corporations.

Early Childhood Education
In the Early Childhood Education program, students will study important topics such as early childhood development, nutrition, first aid, and children’s literature. Students will also receive a broad educational background by completing general education courses in English, mathematics, humanities and sociology. This degree does not prepare students to become certified teachers; however, graduates of the Early Childhood Education major find positions in Head Start programs, Great Start Readiness Programs, day care center, or family day care homes, elementary schools, hospitals, recreation centers, or other child related businesses.
**Industrial Technology and Management**  
If you have technical education, technical training, an apprenticeship or military training in your background and you’re looking for a career move to production supervision, sales engineering, production planning, quality, engineering supervision, project management, continuous improvement, an administrative role or advanced technical position, this degree is for you.

**Manufacturing Engineering Technology – Manufacturing or Quality Concentration**  
This curriculum offers instruction and practical experience in all facets of manufacturing engineering. Study through hands on applied coursework/projects in quality control, manufacturing methods, industrial engineering, plant layout, automation, and uses of lean allows graduates to participate in the design of a total product manufacturing system. A quality concentration is also available for those seeking to become Quality Engineers.

**Product Design Engineering Technology**  
Focusing on all facets of the design process, our Product Design Engineering Technology program will provide you with versatile design skills that apply to a wide range of industries. You will begin with conceptual drawing and move through the creation of complex layouts, prototypes and the integration of manufacturing principles into your design.

**Grand Valley State University**  
([www.gvsu.edu/ce](http://www.gvsu.edu/ce))

Transfer Connections provides services to students who transfer to Grand Valley State University from other colleges and universities with assistance including transfer advising and navigating the academic and cultural landscape of the university.

Services focus on supporting a successful transition, helping transfers build connections and community, and assisting students as they explore and pursue their academic and career goals.

For more information or to schedule an appointment go to Grand Valley State University, Transfer Connections ([www.gvsu.edu/transferconnections](http://www.gvsu.edu/transferconnections)) or call (231) 777-0505 or (616) 215-9067 or visit our office on the MCC Campus Room 1309C, Stevenson Center for Higher Education.

**Nursing-RN to BSN**  
This degree is designed for associate degree and diploma RNs who want to further their education. To participate in this program, you must have an RN license and a 2.5 minimum GPA. Financial aid is available and may include concurrent enrollment at both institutions (online format).

**Michigan State University**  
([www.iat.msu.edu](http://www.iat.msu.edu))

Michigan State University partners with MCC to provide opportunities to students interested in Agriculture programs. MCC offers three degrees, the AAS in Agriculture and the AAS in Food Processing Technology, and the AAS in Urban Forest Management, which combine MCC courses with one of five certificates available from MSU: Agriculture Operations, Fruit and Vegetable Crop Management, Landscape Management, Food Processing and Safety, and Urban Forest Management.

For more information, call (231) 777-0576 to speak with the Muskegon Program Coordinator of the Institute of Agricultural Technology.
Nearly three million people work as truck drivers, hauling goods locally and across the country on our nation’s highways. Many skills are required to be a professional driver and typically they involve being able to work with many people, staying current on transportation laws, understanding trailer load requirements, having mechanical aptitude, following instructions, and safety procedures. Truck drivers often have long hours on the road, but enjoy good salaries and independence. Job prospects for trained, licensed drivers are expected to remain strong through the next decade.

Training Highlights
Complete vehicle training to prepare for an entry-level position in the trucking industry, plus a lot more. Designed for individuals with little or no commercial driving experience, CDL Training Services & Consulting, Inc.’s Professional Truck Driver Training at MCC provides everything needed to receive a Commercial Driver’s License.

- DOT rules, regulations and log books; training to obtain CDL learner’s permit and endorsement preparation; and thorough instruction in map reading, trip planning, and yard and road vehicle handling.
- Certificate after successfully completing the course.
- Basic (160 hrs), and Advanced (184 hrs) classes available
- CPR Training and Certificate
- Basic First Aid Training
- Michigan Secretary of State administered Class A test.

Entry Requirements
A high school diploma or GED is not required. Individuals must be able to read and write the English language, be able to meet the Federal Department of Transportation physical requirements, and have a valid driver’s license at the time of registration. The course trains individuals 18 and over but has limited job placement assistance for individuals under the age of 21.

Additional Items
(not part of course fee)
- Copy of Motor Vehicle Report from the Secretary of State’s Office (Driver’s License Bureau)
- DOT drug screen and physical
- CDL learner’s permit
- Class A license plus any endorsements

The following may disqualify you from entering the truck driving workforce:
- A driving record inconsistent with industry standards for entry-level driving positions
- Any substance-related violations on your motor vehicle record in the past three years
- Recent felony convictions or criminal background
- History of drug or alcohol abuse
- Permanent disability or physical limitations

Training is scheduled around holidays and interruptions caused by weather or unforeseen circumstances.

For more information please refer to the MCC website: www.muskegoncc.edu/cdl
COURSE DESCRIPTIONS
Course Numbering System

Courses offered at Muskegon Community College shall be numbered according to the following system:

- Sequential courses (those that must be taken in specific order), shall be numbered so that the first course in the sequence carries the lowest number. If a course is part of a sequence, prerequisite courses shall be clearly stated in the Course Descriptions section of the catalog, and in the Schedule of Classes.

Courses numbered from within the range 000 to 099 can generally be considered as pre-college level skills development or enhancement courses, designed to help prepare students for success in college level work. Courses numbered below 100 do not count toward a degree or certificate.

- Courses numbered 100 to 199 are introductory courses intended primarily for first-year college students with no significant deficiencies in their academic background.

- Courses numbered 200 to 299 are courses intended primarily for students who have successfully completed one year of college-level coursework. The number 297 shall be reserved for courses being taught on an experimental or temporary basis, before formal addition to the College catalog. The number 299 shall be reserved for independent study courses.

To view current placement guidelines, go to www.muskegoncc.edu/testing/mcc-placement-test/ and click on the Placement Guidelines link.

- This course is only offered when Demand is great enough.
- This course is typically offered during the Fall semester.
- This course is typically offered during the Winter semester.
- This course is typically offered during the Summer semester.
- This course is offered online.
Accounting

ACC 100
Fundamentals of Accounting
3 Cr. Hrs. – 3 Contact Hrs. Ş
Prereq: None
This course is an introductory basic bookkeeping and accounting class that emphasizes the accounting cycle. Day-to-day accounting activities are covered, through the preparation of the financial statements and the process of closing the financial records. Upon successful completion of this class, the student will be well prepared to take ACC 201 Principles of Accounting I. (Students having difficulty with ACC 201 may transfer to this class through the end of the add/drop period with no loss of tuition.)

ACC 201
Principles of Accounting I
4 Cr. Hrs. – 4 Contact Hrs. FHSO
This course introduces principles of accounting including the accounting cycle with emphasis upon theory and financial statements. Other topics covered include cash, receivables, temporary investments, inventories, plant assets, intangible assets, and payroll.

ACC 202
Principles of Accounting II
4 Cr. Hrs. – 4 Contact Hrs. FWO
Prereq: ACC 201 with a minimum grade of “C”
A continuation of ACC 201 covering partnerships, corporations, and manufacturing accounting with emphasis on financial and cost accounting concepts.

ACC 203
Payroll Accounting
3 Cr. Hrs. – 3 Contact Hrs. Ş
Prereq: ACC 201
This course covers in detail the accounting and filing requirements for federal payroll taxes. ACC 203 is offered only as an independent study course. Contact the Business Department to arrange an independent study.

ACC 206
QuickBooks Computerized Accounting
3 Cr. Hrs. – 3 Contact Hrs. WSO
Prereq: ACC 100 or ACC 201 or instructor permission
In this hands-on course, you will learn QuickBooks, the accounting software used by most small- to medium-size businesses and organizations. This course is for everyone who will be entering transactions or using related data for decision making. You will learn to organize QuickBooks’ features to suit your company – as well as how to generate customized financial reports and statements. Entering cash disbursements, cash receipts, accounts receivable, accounts payable, billing, purchasing, inventory, payroll and general journal are all covered. This course counts as a business elective.

ACC 220
Federal Taxation I
4 Cr. Hrs. – 4 Contact Hrs. WO
Prereq: ACC 201 with a minimum grade of “C”
Catalog description: Federal Taxation I is designed to provide students with knowledge of the federal tax code as it relates to individual and business taxation. Students embark on a variety of learning opportunities including hands-on experience working with community organizations to provide tax services to Muskegon residents. The course prepares students for continuing education and career exploration as tax professionals in the private or public industries.
Allied Health

(see also Health Education)

Several Allied Health courses may be taken that do not require a commitment to a program or a special application. Students take these courses to increase their knowledge and skills in special areas or to prepare themselves to enter a health-related position.

AH 101
Medical Terminology
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: None
Designed to assist the beginning health student to master new medical terms and modes of communication. With an understanding of basic terms, the student can proceed to build a functional vocabulary while pursuing a career specialty. Basic anatomy and physiology will be an integral part of the course.

AH 104
Medical Insurance Billing
2 Cr. Hrs. – 2 Contact Hrs.
Prereq: None
An introductory course designed to assist the student to quickly identify insurance coverage appropriately and accurately, complete insurance forms and become familiar with billing procedures. The content of this course is relevant to dental and other allied health insurance billing.

AH 106
Fundamentals of Health Care Delivery
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: None
This course is designed as a general introduction to the health care delivery system. It will prepare the student with the necessary information for (basic) entry into the medical office environment. Topics of discussion will include ethics, law (including the new HIPAA regulatory standards), safety, infection control, patient record keeping, medical transcription, medical reimbursement and managed care.

AH 107
Nurse Aide/Home Health Aide
5 Cr. Hrs. – 9 Contact Hrs.
Prereq: None
The individual who satisfactorily completes this course will be eligible to take the State Nurse Aide Competency Exam and Home Health Care Exam which must be completed within one year. Successful completion of the course and examination will place you on the State of Michigan Registry or allow you to use the training in another state to obtain certification for a “Nurse Aide” according to federal regulations. The Cost of the State Nurse Aide Competency Exam is currently $125.00 and is subject to change.

AH 111
Environmental Stressors and Nutrition
1 Cr. Hr. – 1 Contact Hr.
Prereq: NUR 100 (must complete with C+ or better.
Note: Course restricted to current nursing students.
This course is designed to provide the student with the theoretical foundation for the clinical application of nutrition principles in relation to stress adaptation throughout the nursing curriculum. The focus of the course is on the identification of the role of nutrients in maintaining man’s dynamic equilibrium and the use of therapeutic diets for clients.
AH 196  
Electronic Health Records  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: None  
This course introduces students to the electronic health record. Topics include background and history of electronic health records, terminology, gathering patient information, scheduling appointments, recording of examination information, processing lab tests, selecting codes, and more. Students will have hands-on experience with Electronic Health Records software including medical documentation skills that are transferable. Students will gain conceptual theory and hands-on practice that they need to work in today’s medical office.

CHW 101  
Community Health Worker  
8 Cr. Hrs. – 8 Contact Hrs.  
Prereq: None  
Community Health Workers (CHWs) are a vital part of health and human services delivery in Michigan and are trusted members of the community served. They contribute in many ways by functioning as a consistent source of contact between care providers and individuals, providing case management and care coordination CHWs influence the health of the community by providing outreach, community education, informal counseling, social support, and advocacy. This course follows the Michigan Community Health Worker Alliance (MiCHWA) curriculum and includes 40 hours of internship.

Alternative and Renewable Energy

ARE 115  
Wind Turbine and Solar Array Installation  
3 Cr. Hrs. - 4 Contact Hrs.  
Prereqs: ELTC 101AL&L  
The Wind Turbine and Solar Array Installation lab course uses lecture and lab to specify and install solar arrays for roof-top installations as well as taking down and re-installing a wind turbine. The class is focused on safety, structural integrity, wiring to code, performance evaluation, and customer interaction. Students will have hands-on experience with assembly, installation, and commissioning of these systems.

American Sign Language

ASL 101  
American Sign Language I  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: None  
Study the various aspects of American Sign Language including finger spelling, interpreting, sign vocabulary, facial expression, body movement, and grammatical structure. This course is designed for students who are considering pursuing certification in interpreting.

ASL 102  
American Sign Language II  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ASL 101  
Study the various aspects of American Sign Language including finger spelling, interpreting, sign vocabulary, facial expression, body movement, and grammatical structure. This course is designed for students who would like to pursue certification in interpreting.
Anthropology

ANTH 103 Cultural Diversity in Contemporary Society
3 Cr. Hrs. – 3 Contact Hrs. FWSO
Cultural Diversity in Contemporary Society is an ethnographic analysis of various cultural groups and the regions where they originate. Such groups as African-American, Asian-American, Hispanic-American, and Native-American will be the focus. Emphasis will be placed on their cultural similarities and differences. Students will compare such topics as the cultures’ socialization process, education, gender roles, marriage and family living, religion, health, death and dying, etc.

ANTH 105D
Introduction to Physical Anthropology/Archaeology
4 Cr. Hrs. – 4 Contact Hrs. FWSO
The course introduces the student to the fields of physical anthropology and archaeology through a study of the evolution of Homo sapiens. Emphasis will be placed upon modern evolutionary theory, the known fossil record, dating methods, primatology, prehistoric hominids and technology, population genetics, human variation, bio-cultural adaptation, and the origins of culture. Potential topics and areas of further exploration include forensic science, archaeological dig sites, anatomy, and prehistoric tools.

Applied Manufacturing Technology

AMT 129A
Introduction to Technology
3 Cr. Hrs. – 6 Contact Hrs. FWO
Prereqs: None
This course introduces the student to manufacturing from the Industrial Revolution through current traditional and non-traditional processes, design, blueprint reading, materials, casting processes, quality control, manufacturing systems (JIT, Lean Manufacturing, Rapid Prototyping), automation, process planning (Design for Manufacture, Design for Assembly) and cost analysis. Students will also learn to create documents using word processing and presentation software.

ANTH 110
Introduction to Cultural Anthropology
3 Cr. Hrs. – 3 Contact Hrs. F
Introduces the student to the field of cultural anthropology through a study of language, kinship, technology, political organization, social organization, religion and healing, among other topics. Emphasis will be placed upon an investigation of selected pre-modern groups representative of the world’s major cultural regions.
Art

ART 100A
Art Appreciation
3 Cr. Hrs. – 6 Contact Hrs. FW
An introduction to the visual arts through lecture, projects, and written assignments. Students will explore various themes in art history, learn to analyze and interpret works of art, be exposed to a variety of different kinds of media, and gain an appreciation of the role that visual art plays in society.

ART 104
Drawing I
3 Cr. Hrs. – 6 Contact Hrs. FW
Concentrated attention on drawing as a fine arts medium with study in various subject matter.

ART 105B
Two-Dimensional Form and Surface
3 Cr. Hrs. – 6 Contact Hrs. F
Two-Dimensional Form and Surface is a first-year art course that introduces students to basic design concepts with a focus on how to work with two-dimensional compositional arrangements, illusionary space, depth, and texture. It is a foundation-level requirement in art departments at any transfer school- students considering a major in painting/drawing, printmaking, photography, art education, digital arts, graphic design, or video game design should start with this course. Students learn how to develop strong, imaginative compositions based on the creative process: brainstorming, problem-solving, experimentation with traditional and nontraditional materials and techniques, and the effective use of the language of art (visual elements and design principles as they pertain to two-dimensional images and surfaces).

ART 106B
Beginning Printmaking-Relief and Monotype
3 Cr. Hrs. – 6 Contact Hrs. F
The study of a variety of relief and monotype printmaking techniques.

ART 107
Painting I
3 Cr. Hrs. – 6 Contact Hrs. FW
The study of oils or acrylics through diverse subject matter.

ART 108
Ceramics I
3 Cr. Hrs. – 6 Contact Hrs. FW
A study of the nature of clay through hand building, pottery processes, and glazing, stressing skill development and expressive experimentation.

ART 109
Sculpture I
3 Cr. Hrs. – 6 Contact Hrs. D
An introduction to the basic materials and techniques of sculpture.

ART 117
Three-Dimensional Form and Space
3 Cr. Hrs. – 6 Contact Hrs. W
Three-Dimensional Form and Space is a first-year art course that introduces students to basic design concepts with a focus on how to work with actual space, texture, and mass. It is typically a foundation-level requirement in art departments at any transfer school- students considering a major in sculpture, ceramics, glass, jewelry/metals, fiber arts, art education, theatre set design, film production, architectural design, industrial design, product design, or video game design should start with this course. Students learn how to develop strong, imaginative compositions based on the creative process: brainstorming, problem-solving, experimentation with traditional and nontraditional materials and techniques, and the effective use of the language of art (visual elements and design principles as they pertain to three-dimensional objects and space).

ART 118
Beginning Printmaking Intaglio
3 Cr. Hrs. – 6 Contact Hrs. W
The study of a variety of intaglio printmaking techniques.
ART 198  
Art History I  
3 Cr. Hrs. – 3 Contact Hrs.  
Ancient art to renaissance. A historical survey of art from Ancient times to 1400 tracing the development of styles and the influences of major social, religious and political events.

ART 199  
Art History II  
3 Cr. Hrs. – 3 Contact Hrs.  
Renaissance to modern. A historical survey tracing the development of art from the Renaissance to the present with an emphasis on painting.

ART 202  
Contemporary Art History  
3 Cr. Hrs. – 3 Contact Hrs.  
A comprehensive survey of art and art styles of the 20th & 21st centuries. A study of backgrounds and origins of certain current styles, the course draws from examples in painting, sculpture and architecture of America and the world. Changing ideas and trends are analyzed through lecture and discussion.

ART 204B  
Drawing II - Transfer Portfolio Preparation  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ART 104  
A continuation of ART 104, with an emphasis on preparing an art portfolio for the college transfer process, thematic development, concentration on the relationship of form to content and further experimentation in varied media and techniques.

ART 207  
Painting II  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ART 107  
Concentration in a particular medium of the student’s choice with a study of the nature of that medium through a creative approach to painting problems.

ART 208  
Ceramics II  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ART 108  
A study of traditional pottery processes through concentrated work on the potter’s wheel, glazing, and firing experiences.

ART 209  
Sculpture II  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ART 109  
A continuation of ART 109, with concentration in materials of individual interest.

ART 214  
Principles of 35 mm B&W Photography (formerly GR 200L&L)  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: None  
Fundamentals of photography, including cameras, emulsion characteristics, processing, filters, chemistry, and optics. The student must have the use of a 35 mm SLR or viewfinder camera. The student will be expected to buy film and paper as directed by the instructor.

ART 215  
Intermediate Photography (formerly GR 225)  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ART 214  
Intermediate Photography is a course in photography that builds on basic camera and black and white darkroom techniques introduced in Principles of Photography, and introduces many new skills and approaches to the photographic medium. More sophisticated compositional skills and aesthetics of both shooting and printing photographs are developed throughout the course. Alternative darkroom processes are introduced, such as cyanotype, sepia toning and hand coloring. We will be experimenting outside of the conventions of the 35mm format with the Holga camera and the pinhole camera. More advanced technical skills such as learning The Zone System, using archival printing and professional presentation are also emphasized.
ART 220  
Figure Drawing  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereqs: ART 104 or GRD 130  
Students will learn how to draw the human figure from observation using a variety of techniques and a range of drawing media. Portions of the course will include computer applications where students scan and manipulate hand-drawn imagery on the computer and also use Wacom tablets to draw directly onto the computer screen.

ART 240  
Professional Practices in Art  
3 Cr. Hrs. – 3 Contact Hrs.  
This course will help students develop a professional visual identity by generating business logos, letterhead, a web presence, digital portfolio, and other materials related to the pursuit of an art- or design-based business. This course covers business related issues involved in any artistic or design based profession including professional artist, gallery owner, museum and gallery curator, art critic, historian, graphic designer, interior designer, game designer, illustrator, and photographer.

ART 250  
Gallery/Collection Practicum  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereqs: Secure instructor permission  
Note: 12 or more credit hours of “C” work or better completed in art courses required.  
Students will gain practical experience in art gallery operations and the proper handling and care of artworks. Emphasis is placed on standard concepts and methods of exhibiting art as practiced in the professional art world. Students assist art faculty in the basic operations of the MCC Overbrook Art Gallery and the MCC Art Collection as a “hands-on” learning laboratory. Priority is given to students enrolled in the Visual Art Entrepreneur Degree program.

ART 290CI  
Art Cooperative Internship  
1-4 Cr. Hrs. – 1-4 Contact Hrs.  
Prereq: Instructor permission  
Note: Priority is given to students enrolled in the Visual Art Entrepreneur degree and/or those who have taken one or more art history courses (ART 198, 199, or 202). Student must have a GPA of 2.5 or better and have completed a minimum of 12 credit hours in art.  
The Cooperative Internship Program is a paid or non-paid fieldwork experience within the student’s major area of study, typically at an art museum, community art center, or commercial gallery. Variable credit may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired; however, only 3 credit hours can be applied specifically toward the Visual Art Entrepreneur degree. This course is offered on a pass/no pass basis.
Astronomy

ASTR 101
General Astronomy
4 Cr. Hrs. – 4 Contact Hrs. FWSO
This course is a broad, generally non-mathematical, survey of the science of astronomy. Topics include: historical astronomy, the mechanics and clockwork of the night sky, astronomical instruments, the solar system, stellar evolution, the Milky Way, galaxies and theories about the origin and evolution of the universe. There will be opportunities for observation of astronomical objects with observatory telescopes.

ASTR 105A
Cosmology
4 Cr. Hrs. – 4 Contact Hrs. FWO
Recommend: Math 098 or higher with a “C” or better
While Astronomy is concerned with the contents of the Universe, Cosmology is the science of the origin, current state and ultimate fate of the universe. In this course, the foundations of Modern Cosmology are presented from a historical perspective, covering the physical fundamentals, the impact of Einstein’s Theories of relativity on modern cosmologies and finally from the perspective of the most recent astronomical discoveries.
Automotive Technology

Students in these courses must have approved safety glasses.

AT 114
Automotive Power Plants (Engine Rebuilding)
3 Cr. Hrs. – 6 Contact Hrs. 
Prereq: None
This course includes the proper procedures and machine operations necessary to service completely, overhaul, repair or rebuild the automotive engine. Theory of engine operation and construction are also dealt with.

AT 120
Intro to Electrical Systems I
3 Cr. Hrs. – 6 Contact Hrs. 
Coreq: AT 121
A study of the fundamentals of electricity, ignition (Electronic Computer Control including DIS), cranking and charging systems. Basic electrical test equipment is also covered.

AT 121
Electrical Systems II
3 Cr. Hrs. – 6 Contact Hrs. 
Coreq: AT 120
Covers testing and servicing of ignition, cranking and charging systems. Includes the use of modern electronic test equipment and industry diagnostic methods.

AT 122
Fuel Systems and Emission Controls
3 Cr. Hrs. – 6 Contact Hrs. 
Prereqs: AT 120 and AT 121
Coreq: AT 123
This course will cover a study of fuel system (including TBI and PFI) and emission controls (including 4 gas analyzer). Diagnosis and service of system components is also covered. The operation of 2-cycle and 4-cycle engine theory is introduced.

AT 123
Engine Tune Up (Drive-ability)
3 Cr. Hrs. – 6 Contact Hrs. 
Prereqs: AT 120 and AT 121
Coreq: AT 122
A study of the engine accessories included under electrical, ignition and fuel systems. Covers the diagnosis, servicing, and repair of these systems and component parts as related to the entire engine operation in the vehicle.

AT 140
Intro to Hybrids and Alternative Fuels
3 Cr. Hrs. – 6 Contact Hrs. 
Prereq: None
This class will provide an overview of hybrid and alternative fueled vehicles. Practical manufacturing theory and production methods of both biodiesel and ethanol will be explored. Students will engage in small scale production of both biodiesel and ethanol. Exposure to various alternative powered vehicles will occur as available.

AT 150A
Automotive Brakes
3 Cr. Hrs. – 4 Contact Hrs. 
Prereq: None
This course covers theory, repair, and adjustment of hydraulic and Anti-lock Braking Systems (ABS) brake systems and related machining equipment. Students will learn in this class through hands on experience how to diagnose problems with ABS and Electronic Stability Control in addition to rebuild and bleed advanced braking systems. Students have the opportunity to become certified via the State of Michigan test in the area of brakes.

AT 160A
Automotive Air Conditioning
3 Cr. Hrs. – 4 Contact Hrs. 
Prereq: None
This course covers theory, repair, and service of the automotive air conditioning system. Air conditioning for both R12 and R134A diagnosis testing and service is covered. Students have the opportunity to become certified via the State of Michigan test in the area of air conditioning.
AT 210  
**Powertrains (Manual Drive-trains)**  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: None  
This course gives the student experience in theory, diagnosis and repair of automotive drive trains. It includes the study of clutches, drive shafts, universal joints, differentials, axles, and manual FWD & RWD transmissions.

AT 211  
**Automatic Transmissions**  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: None  
A study of the theory of operations, hydraulic circuits, gearing adjustments, and repair of automatic transmissions, both FWD & RWD (including electronic controls).

AT 212  
**Alignment and Suspension**  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: None  
This course covers the theory, repair, and adjustment of steering and suspension systems as well as the operation of modern four-wheel alignment and wheel balancing equipment.

AT 214  
**Service Management**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: None  
Note: Must be second-year automotive student  
A course covering the responsibilities of a service manager in large and small service garages. Lectures, tours, and outside speakers emphasize industrial practice in customer, mechanic, and management relationships.

AT 223  
**Advanced Engine Performance**  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: AT123  
This course provides a variety of learning and assessment activities students can use to analyze engine mechanical integrity, induction systems, and exhaust systems. Students will have hands on experience in the repair process of these systems. Theory and operation of electronic engine controls includes: alternative fuels; electronic fuel injection, electronic ignitions, on-board diagnostics and current emission systems. Laboratory practice includes proper set up and use of digital storage oscilloscopes, scan tools, engine analyzer and five-gas emission analyzers.

AT 230  
**Automotive Service**  
2 Cr. Hrs. – 4 Contact Hrs.  
Prereq: None  
This course is designed to simulate an automotive repair facility. Student will engage in automotive repair projects scheduled to strengthen their knowledge and provide shop experience. Coursework may include visits to local repair facilities to complete the class hours.
Biology

BIOL 106L&L
Anatomy and Physiology II
4 Cr. Hrs. – 4 Contact Hrs. F
Prereq: BIOL 105L&L with a minimum grade of “C”
Note: Before taking this course, it is highly recommended the student first complete a chemistry course.
This laboratory course is a continuation of BIOL 105L&L for students in nursing and other health-related fields that require an intensive study of the anatomy and physiology of the human organism. Emphasis is on the skeletal, muscular, nervous, digestive, cardiovascular, respiratory, urinary, endocrine and reproductive systems.

BIOL 109L&L
Food Technology
4 Cr. Hrs. – 4 Contact Hrs. S
This laboratory course is a study of chemical, biological, and physical principles as they pertain to food preparation, processing and production. Students apply and study the concepts in a food preparation laboratory.

BIOL 113L&L
Introductory Biology
4 Cr. Hrs. – 7 Contact Hrs. FWSO
Introductory course for non-science majors designed to provide a biological literacy and a survey of broad biological concepts. Topics include organization of living things, energy transformations, homeostasis, genetics, evolution, and classification of living organisms. The laboratory portion will provide opportunities for practicing the process of science.

BIOL 115
Introduction to Anatomy and Physiology
4 Cr. Hrs. – 4 Contact Hrs. FWSO
This course is a structural and functional approach to the human body through the study of cell, tissues, and body systems. Emphasis will be placed on cell biology, tissues, and the structure and function of the integumentary, skeletal, muscular, nervous, circulatory, lymphatic, respiratory, digestive, urinary, endocrine, and reproductive systems. While there is no lab component to this course, students will utilize high quality images to study the spatial relationships between anatomical structures.

BIOL 115L
Introduction to Anatomy and Physiology Lab
1 Cr. Hrs. – 3 Contact Hrs. FWS
Coreq: BIOL 115 (Introduction to Anatomy and Physiology)
This three-hour laboratory course is a lab to accompany Introduction to Anatomy and Physiology lecture (BIOL 115). The lab will present a structural and functional approach to the human body through the study of cells, tissues, and body systems. This course is geared toward students who are applying for allied health programs such as radiology tech, medical assisting, and dental assisting that only require a one semester survey course of anatomy and physiology. Emphasis will be placed on using models and laboratory experiments to explore cell biology, tissues, and the structures and functions of the integumentary, skeletal, muscular, nervous, circulatory, lymphatic, respiratory, digestive, urinary, endocrine, and reproductive systems.
BIOL 121 LAB
Plant Biology Laboratory
1 Cr. Hr. – 3 Contact Hrs.  ☐
Co-req:  BIOL 121LEC

BIOL 121 Lab is a laboratory for the introductory plant biology course that will provide an overview of plants' morphology, physiology, development, and genetics. Also included in this course will be topics on the diversity, taxonomy, systematics, ecology, and evolution of plants.

BIOL 121 LEC
Plant Biology Lecture
3 Cr. Hrs. – 3 Contact Hrs.  ☐
Co-req:  BIOL 121LAB

BIOL 121LEC is an introductory plant biology course that will provide an overview of plants' morphology, physiology, development, and genetics. Also included in this course will be topics on the diversity, taxonomy, systematics, ecology, and evolution of plants.

BIOL 121L&L
Plant Biology
4 Cr. Hr. – 6 Contact Hrs.  ☐

BIOL 121L&L is an introductory course intended for students interested in botany, horticulture, plant ecology, agriculture, or other related fields. This lecture and laboratory course provides an overview of plant anatomy, physiology, development, and genetics. Also included in this course will be topics on the diversity, taxonomy, systematics, ecology, and evolution of plants. The laboratory portion of the course uses a variety of techniques including microscopy, dissection, growing and propagating plants, measuring physiological processes, taxonomy, and sampling natural plant communities.

BIOL 130L&L
General Biology I
1 Cr. Hrs. – 2 Contact Hrs.  ☐

High school chemistry highly recommended

This course is an introductory biology course designed for the science major and as a prerequisite for advanced biology courses. The topics covered include cellular and molecular biology. This course will provide an introduction to cell structure and function, metabolism, growth and development, and molecular basis of inheritance. The laboratory portion is designed to enhance the lecture material with an emphasis on the process of science.

BIOL 131L&L
General Biology II
4 Cr. Hrs. – 7 Contact Hrs.  ☐

Prereq:  Grade “C” or better in BIOL 130 L&L

This second-semester general biology course is designed for the science major and as a prerequisite for advanced biology courses. Students will be introduced to the diversity of living organisms with an emphasis on fundamental biological processes operating at the scale of individual organisms. The laboratory portion of the course is designed to enhance lecture material with an emphasis on the process of science, experimental design, quantitative analysis of data, and scientific communication.

BIOL 152L&L
Human Anatomy
4 Cr. Hr. – 6 Contact Hrs.  ☐

BIOL 152L&L is an introductory course intended for students pursuing majors in allied health and medical fields. The course will introduce the structures of human anatomy with clinical correlations included where appropriate. The lecture portion will provide a detailed overview of microscopic and gross anatomy. The laboratory portion will focus on cell biology, histology and anatomy of the integumentary, skeletal, muscular, nervous, digestive, lymphatic, cardiovascular, respiratory, urinary, endocrine and reproductive systems. This is the first of a two-semester sequence in human anatomy and physiology. Upon completion of BIOL 152L&L with a C or higher, students may enroll in BIOL 252L&L, Human Physiology.

BIOL 152SUP
Human Anatomy - Supplemental Instruction
4 Cr. Hr. – 6 Contact Hrs.  ☐

Coreq:  BIOL 152L&L

This class will provide support for students who require additional instruction with BIOL 152. This course will be required for students seeking to repeat BIOL 152 to help assure their success. One hour a week will be spent reviewing lecture concepts and one hour a week will be spent in the lab reviewing laboratory concepts.
BIOL 200
Introductory Evolution
1 Cr. Hr. – 1 Contact Hr. W
Prereqs: Any 100-level or higher Biology course
This course is a preparatory study of the historical development, the evidence, and the mechanisms of the biological evolution theory. Scientific hypotheses on the origin of organic molecules will also be investigated along with the examples of biological evolution in today’s community. This course provides a learning experience on a central unifying concept of biology for non-majors and majors interested in exploring the diversity and similarities among living organisms.

BIOL 207A
Microbiology Laboratory
1 Cr. Hr. – 3 Contact Hrs. FWS
Prereq: BIOL 105L&L, BIOL 130L&L OR BIOL 152L&L with a minimum grade of “C” or instructor permission.
Coreq: BIOL 207LEC
A general microbiology lab course that includes techniques and experiments for the observation, testing, identification, and understanding of concepts related to microbes of human importance. Includes aspects of microbial culturing using various media, aseptic techniques, slide preparations and staining, techniques to evaluate microbial characteristics and identify microbes, and microbial control.

BIOL 250LAB
Coral Reef Ecology Lab
3 Cr. Hrs. – 3 Contact Hrs. S
Prereq: BIOL 250LEC, GEOL 250LEC, or Instructor Permission
This field study course will provide students a hands-on opportunity to study coral reef ecosystems in and around the Caribbean Island of Nevis. The biology, chemistry, geology, geography, and Caribbean history and culture will be studied in the classroom and in country. Through data collection and analysis, students will examine the effects of global climate change and ocean acidification on reef ecosystems. Individuals may participate through scuba, snorkel or on-board data collection and analysis. Ability to swim and SCUBA certification are a plus but not mandatory for participation. Travel will take place in the summer semester. Travel dates may vary year to year. Students must be 18 years of age prior to travel.

BIOL 250LEC
Coral Reef Ecology Lecture
2 Cr. Hrs. – 2 Contact Hrs. W
Prereq: Instructor Permission
Note: Students must be at least 18 years of age prior to the trip. Approximate cost for the course and dates for the trip can be viewed within Student Planning. Travel will take place in early June.
This field study course will provide students a hands-on opportunity to study coral reef ecosystems in and around the Caribbean Island of Nevis. The biology, chemistry, geology, geography, and Caribbean history and culture will be studied in the classroom and in country. Through data collection and analysis, students will examine the effects of global climate change and ocean acidification on reef ecosystems. Individuals may participate through scuba, snorkel or on-board data collection and analysis. Ability to swim and SCUBA certification are a plus but not mandatory for participation. Travel will take place in the summer semester and will require students to sign up for a 1-credit laboratory course.
BIOL 251
Advanced Coral Reef Ecology
1 Cr. Hrs. – 1 Contact Hrs. W
Prereq: BIOL 250LEC and BIOL 250LAB
Note: The two-week field experience will take place in early June. The approximate cost ($3800) will be billed to your tuition as a course fee. The course fee covers airfare, food, lodging, ground transportation, guide fees, travel insurance, SCUBA diving/snorkeling, equipment rental, island tour, and rainforest and medicinal plant hike. Course fee is non-refundable after the drop deadline. Course fees may vary depending on airfare, dive fees, and food and lodging costs. These costs are approximate costs only. Actual costs will be listed on Web Advisor.

This study abroad course is a continuation of BIOL/GEOL 250Lec and BIOL/GEOL 250Lab for students wanting additional experience studying coral reef ecology. Students will learn the AGRRA (Atlantic and Gulf Rapid Reef Assessment) method for conducting scientific surveys of coral reef health and coral diversity. Classroom instruction to learn the methodology and coral identification procedures will take place prior to the field experience. Students will spend 14 days on the island of Nevis (St. Kitts and Nevis, West Indies) during the summer semester where they will survey several coral reefs using the AGRRA method. Trip dates will vary each year but will typically be in June. SCUBA certification is required for this course. Note: Students will receive a temporary grade of Incomplete at the conclusion of the winter semester. Following the travel portion of the course, a grade change form will be completed and an updated final grade will be submitted to the Registrar’s office. Students are encouraged to speak with the Financial Aid office to determine how the incomplete will affect their Standard Academic Progress and Financial Aid eligibility.

BIOL 252L&L
Human Physiology
4 Cr. Hrs. – 6 Contact Hrs. FW
Prereq: 105L&L or BIOL 152L&L with a minimum grade of “C”

This will focus on the fundamental mechanisms of human physiology, with an emphasis on normal function; clinical correlations will be included where appropriate. The lecture portion will provide a detailed overview of body system function with respect to regulation and control mechanisms, especially cellular mechanisms. The laboratory portion will focus on the collection and analysis of system-based physiologic data using digital recording systems. Student designed experiments and literature reviews will be an integral part of the laboratory experience.

BIOL 280
Applied Research in Biology I
3 Cr. Hrs. – 5 Contact Hrs. F W
Prereq: Complete any college biology course with a grade of “C” or better, or obtain instructor permission.

This lecture/lab course will focus on preparing students to conduct group research projects in a biology-based laboratory setting. The lecture part of the course will provide students the opportunity to learn how to define a research question, formulate a relevant hypothesis, search the literature to gather information related to their research question and hypothesis, analyze scientific literature, prepare a research proposal, analyze and present data, and write a lab report. The research proposal will describe the background, methods, and predicted results of the research they will be conducting in the lab part of the course. The lab portion of the course will teach students biological laboratory skills and techniques that they will use when conducting their research project, including but not limited to genetic analysis techniques, microbiological techniques, preparation of solutions, pipetting, using instrumentation, and lab safety. A significant part of the lab experience will be focused on data collection related to student research projects. Research topics may vary each semester.
BIOL 281  
Applied Research in Biology II  
3 Cr. Hr. – 5 Contact Hr.  FW  
Prereq: Complete BIOL 280 with a grade of “C” or better.

This lecture/lab course will focus on preparing students to conduct group research projects in a biology-based laboratory setting. The lecture part of the course will provide students the opportunity to learn how to define a research question, formulate a relevant hypothesis, search the literature to gather information related to their research question and hypothesis, analyze scientific literature, prepare a research proposal, analyze and present data, and write a lab report. The research proposal will describe the background, methods, and predicted results of the research they will be conducting in the lab part of the course. The lab portion of the course will teach students biological laboratory skills and techniques that they will use when conducting their research project, including but not limited to genetic analysis techniques, microbiological techniques, preparation of solutions, pipetting, using instrumentation, and lab safety. A significant part of the lab experience will be focused on data collection related to student research projects. Research topics may vary each semester. Students that have completed Biology 280 and would like another research experience will enroll in this course.

BIOL 290CI  
Biology Internship  
Contact Life Science chairperson  D

BIOL 299  
Independent Study  
Variable Credit  D  
This course is open to students who have successfully completed four hours of Biology, or with permission of the instructor. The independent study will include field or laboratory study and library research. The instructor will aid the student in the selection and development of the study in keeping with the philosophy, techniques and methods or research. Open enrollment.
BUS 108
Introduction to Project Management
3 Cr. Hrs. – 3 Contact Hrs. O
This Course provides a basic foundation of knowledge from which processes and procedures can be learned and developed for management of projects. It also describes Project Management tools that can be used to effectively create and manage various types of planning and scheduling activities that are required for completion of a project. Upon completion, students will be prepared to take the Project Management Professional (PMP) certification exam.

BUS 114
Personal Finance
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: None
This course is oriented to the practical needs of the citizen-wage-earning-consumer. This course will consider the structure of the American economic system, the impact of government on this system, and prudent economic management of the individual’s finances, such as insurance, budgeting and the use of credit. This course is designed for the student’s personal needs in today’s society.

BUS 121
Introduction to Business
3 Cr. Hrs. – 3 Contact Hrs. FWSO
This is a general course in business principles, problems, and practices, which provides an understanding of the operation of the American Business System and its place in the economy. Information concerning more effective use of business services in personal affairs is included as well as preparation for future business courses.

BUS 122
Principles of Management
3 Cr. Hrs. – 3 Contact Hrs. FWSO
A study of the managerial functions of planning, organizing, staffing, directing, and controlling with analysis of the on-going process; knowledge which a manager must have in order to achieve coordination for the attainment of company objectives.

BUS 123
Business Law I
3 Cr. Hrs. – 3 Contact Hrs. FWSO
This course is a study of the Uniform Commercial Code Text and of the general laws applicable to business covering law and society contracts, agency and employment, commercial paper, personal property, bailments and sales.

BUS 125
Supervision
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: None
A review of basic leadership skills needed to effectively supervise people with emphasis on communications, human relations, and the supervisor’s role in employee recruitment, selection, training and evaluations. Role-playing and other participation methods will be used.

BUS 126
Business Math
3 Cr. Hrs. – 3 Contact Hrs. FWSO
Prereq: None
This course covers a review of basic computational skills, percentages, inventories, depreciation, and other financial applications. The course is designed to increase competence in fundamental mathematical skills which apply to business.

BUS 127
Human Relations
3 Cr. Hrs. – 3 Contact Hrs. FWSO
Prereq: None
A study of the problems of working with people in a business environment. The focus is on dealing positively with employee morale, motivation, leadership, group behavior, personality, productivity, hiring, and training.
BUS 131
Intro to Entrepreneurship
1 Cr. Hr. – 1 Contact Hr. FW
Prereq: None
This is the first course in the Entrepreneur degree programs’ core set of classes. It is open to all students interested in learning about the advantages and challenges of starting a business. Students research the definition of entrepreneur, explore how to identify business ideas, and examine the preparation, time commitments, personal skills, and resources needed for a successful business startup. They will develop and evaluate their own business ideas. Successful entrepreneurs from the community will guest lecture to add their expertise and insights.

BUS 161A
Effective Selling
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: None
This course includes an analysis of the sales transaction with classroom sales demonstrations. Attention is given to topics such as: consumer characteristics, buying motives, product performance, sales aids, overcoming customer objections, and closing the sale.

BUS 162
Principles of Retailing
3 Cr. Hrs. – 3 Contact Hrs. WO
Prereq: None
A survey of past and present retailing practices and procedures. Retail management methods are studied, along with retail store locations and layout, equipment, display advertising, personnel policies, maintenance, inventory and cost control.

BUS 166
Quality Customer Service
3 Cr. Hrs. – 3 Contact Hrs. F
Prereq: None
A course in understanding what customer service is and how to implement it into today’s organization.

BUS 167
Professionalism in Your Career
1 Cr. Hr. – 1 Contact Hr. FWG
Prereq: ENG 101
This course is designed to professionally prepare students for their careers. The course is geared to prepare students to interview, develop a professional attitude, etiquette skills, assess and develop conflict management and collaboration practices, and formulate a plan for lifelong learning so they may maintain their competitive advantage in the workplace.

BUS 168
Keyboarding
1 Cr. Hr. – 1 Contact Hr. FWS
Prereq: None
This course is designed for the student with no previous formal typing instruction. A student with a typing speed of 20-25 wpm should enroll in BUS 181C. This course develops basic alpha and numeric touch keyboarding skills for persons who will be using computer terminals for processing information.

BUS 179
Word Processing Part I
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: CIS 100 or CIS 110 or CIS 120A
Note: Students proficient in Windows may seek instructor permission to waive the prerequisites. This course is designed for the person who types 25-35 words per minute and has basic computer skills.

Introductory and intermediate word processing features and concepts are taught, as well as document formatting. Through extensive hands-on training, students will be given the opportunity to become proficient in Microsoft Word. A grade of “C” or better is required to advance.
BUS 181C  
Office Procedures I Document Formatting  
3 Cr. Hrs. – 3 Contact Hrs.  
Recommended Coreq: BUS 180D  
This course is designed for the person who has had no formal training in formatting business documents, has minimal word processing skills, and types 25-35 words per minute. The purpose of this course is to develop correct techniques and basic keyboarding skills to increase speed and accuracy. The major portion of the course covers correct formatting procedures for business correspondence, reports, and tables using Microsoft Word. Recommended for all persons regardless of major. A grade of “C” or better is required to advance.

BUS 182C  
Office Procedures II Document Production  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereqs: BUS 180D and BUS 181C with a minimum grade of “C” in both  
This course has two major objectives: to provide the student with skill-building opportunities through the use of specially designed software and to allow the student to integrate word processing and document formatting skills while improving production speed and accuracy. A grade of “C” or better is required to advance.

BUS 195  
Medical Records Management  
3 Cr. Hrs. – 3 Contact Hrs.  
This course uses the Medisoft patient accounting software package that is in use in thousands of medical offices across the country. The student will learn how to use the basic features of the software including: inputting patient information, processing patient transactions, producing various reports, printing statements, and scheduling appointments. The course also covers the theory and procedures for the medical billing process.

BUS 200  
International Business  
3 Cr. Hrs. – 3 Contact Hrs.  
This is an introductory course designed to help students become familiar with, understand, and appreciate people from different cultures to promote a more effective basis for working together in the business world. Emphasis and application are placed upon business etiquette and business practice as they differ in various cultures. The course will explore reasons companies choose to enter the international market. Students will learn how companies use various strategic marketing approaches and government resources to expand their operations into the international market.

BUS 204  
eMarketing  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereqs: None  
The course provides students with a framework of knowledge required to design and implement an effective digital (electronic) marketing strategy either independent of or in conjunction with traditional marketing tools. Students will understand key marketing principles related to website creation, email, social media, video, domain selection, internationalization, online copy writing, analytics and other new media concepts. Students will combine these concepts with an evaluation of legal and ethical concerns about eMarketing to formulate and assess electronic marketing plans. The course will include the creation of a comprehensive, semester-long eMarketing portfolio as part of a project.

BUS 220  
E-Business  
3 Cr. Hrs. – 3 Contact Hrs.  
This course provides an overview of the aspects and opportunities of doing business on the Internet, by examining how e-business strategies differ from those of a land only based business. Topics include the history of business on the Internet, ability of a business using the Internet, what makes an effective e-business web site, opportunities for e-business in international markets, cultural and technical considerations of international e-business, mobile e-business, technology, marketing, payments, safety, security, customer service, regulation, ethics, intellectual property, and other current issues facing businesses using the Internet.
As part of this class students will create a functional e-commerce store front.

**BUS 222**  
Fundamentals of Organizational Behavior  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: BUS 122  
Organizational Behavior will revolve around the seven major competencies essential to managing an organization; managing self, managing communication, managing diversity, managing ethics, managing across cultures, managing teams, and managing change.

**BUS 223**  
Starting Your Business Plan  
4 Cr. Hrs. – 4 Contact Hrs.  
Prereq: BUS 131 or instructor permission  
This hands-on course will help students learn about key finance and marketing concepts and how they apply to starting/running their own business. Students will identify their business idea and learn how to create and communicate the necessary marketing data and financial statements to support loan applications, start, and manage their business.

**BUS 240**  
Entrepreneurship Capstone  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereqs: BUS 223  
This is the final class of the entrepreneur core requirements. Students will research and create a written operations plan for their new business. They will integrate their marketing, human resources, and financial plans from prior entrepreneurship program courses with their operational plan, into one comprehensive business plan. Students will practice communicating about their business in formal and social media environments. Finalized business plans will be presented to faculty, financial experts, and/or entrepreneurs. Students may compete in local or national business plan competitions.

**BUS 260**  
Principles of Marketing  
3 Cr. Hrs. – 3 Contact Hrs.  
Recommended Coreq: BUS 121 or sophomore standing  
The study of the task and importance of marketing, the movement of goods from producer to consumer, channels of distribution, marketing functions and institutions, the ultimate consumer, the industrial consumer, and the retailing and wholesaling systems.

**BUS 262**  
Social Media  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereqs: CIS 110 or CIS 120A, and ENG 101 or equivalent  
Students explore emerging social media technologies and processes and study their application in a variety of contemporary settings. Students will learn how to use and author content for such online tools such as blogs, microblogs, collaboration mechanisms, podcasts, RSS-feeds, video, bookmarking, and other emerging web technologies. The course will also study how to use these technologies to monitor conversations on the Internet, engage online communities, identify influencers, and establish thought leadership. (This course is also listed as COM 262.)

**BUS 263**  
Advertising Dynamics  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: None  
This course presents methods and techniques in modern advertising strategy, providing information to prepare an entire advertising campaign including selection of media, copy writing and advertising decision-making.

**BUS 266**  
Quality Customer Service II  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: BUS 166  
Measurement, Plan, and Action. This course will take the basic concepts of Customer Service taught in BUS 166 and allow students to measure the outcome that it has on customers. With the results of these surveys, individuals will then be able to formulate a customer service plan and then put this plan into action.
BUS 273A  
**Human Resource Management**  
3 Cr. Hrs. – 3 Contact Hrs.  
*Prereq: None*  
Overview of personnel relationships in a business institution covering areas of recruiting, selecting, training, evaluating, motivating, and rewarding of employees and the process involved in the accomplishments of such objectives.

BUS 280C  
**Word Processing Part II**  
3 Cr. Hrs. – 3 Contact Hrs.  
*Prereqs: BUS 180D and BUS 182C with a minimum grade of “C” in both*  
This course builds on the skills and concepts learned in the introductory course. Advanced word processing features are covered. BUS 280C is a hands-on course and provides students the opportunity to be well prepared for Microsoft Office Word Certification.

BUS 290CI  
**Cooperative Internship Program**  
1–4 Cr. Hrs.  
*Prereq: ENG 101 and instructor permission*  
The Cooperative Internship Program is a paid or non-paid fieldwork experience in business and/or industry within the student’s major area of study. Variable credit may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired; however, the number of credit hours which can be applied toward a degree/certificate depends on the student’s course of study and departmental requirements. The maximum number of hours of cooperative internship is 12 credit hours depending upon the program.
CHEM 100LEC
Fundamentals of Chemistry
4 Cr. Hrs. – 4 Contact Hrs. FWSO
Recommended Prereq: Math 098 or higher with a grade of C or better OR completion of Algebra II from high school with a grade of C or better.
Coreq: CHEM 100A
A course emphasizing fundamentals, symbols, formula, nomenclature, oxidation states, atomic structure, the periodic law, writing and balancing equations, stoichiometry, solutions, and gas law problems.

CHEM 100A
Fundamentals of Chemistry Laboratory
1 Cr. Hr. – 3 Contact Hrs. FWSO
Recommended Prereq: Math 098 or higher with a grade of C or better OR completion of Algebra II from high school with a grade of C or better.
Coreq: CHEM 100LEC
Laboratory theory and practice of topics included in CHEM 100LEC.

CHEM 101LEC
General and Inorganic Chemistry
4 Cr. Hrs. – 4 Contact Hrs. FWSO
Prereqs: CHEM-100LEC, CHEM-100A minimum grade of “C” (or CHEM-101SUP concurrently) and Math 109 or Math 111, either previously or concurrently.
Coreq: CHEM 101A

Business and Technical Communications

BCOM 102
Advanced Business and Technical Communications
3 Cr. Hrs. – 4 Contact Hrs. FWSO
Prereq: ENG 101 with a minimum grade of “C”
This course is designed for business and technical students and for people already in the work force who want to become proficient in business and technical communications. Major emphasis is placed on writing effective reports, manuals, instructions, and directions for specific audiences using appropriate style and format. While development of effective writing is the purpose of any English class, no other course concentrates on specific business and technical reporting styles, formats, and techniques. Revision and proofreading skills necessary for appropriate business and technical correspondence are stressed. Lab hours outside of scheduled class time will be necessary.

Business Technology
(See Business)

Chemistry

Students who have not successfully completed Chemistry 100 must take a Chemistry Placement Test before enrolling in Chemistry 101. This test can be taken in the Testing Center. Test results will help place a student correctly into the MCC chemistry sequence.
Course topics are: the physical states of matter, structure of matter, bonding, quantitative relationships involving mass and energy, solutions, ideal and real gases, gas mixtures, oxidation-reduction, and elementary thermodynamics.

**CHEM 101A**

**General and Inorganic Laboratory**

1 Cr. Hr. – 3 Contact Hrs. **FW**

Prereqs: CHEM-100LEC, CHEM-100A minimum grade of “C” (or CHEM-101SUP concurrently) and Math 109 or Math 111, either previously or concurrently.

Coreq: CHEM 101LEC.

Laboratory theory and practice of topics included in CHEM 101LEC.

**CHEM 101SUP**

**Chemistry 101 Fundamentals**

2 Cr. Hr. – 2 Contact Hrs. **FW**

Coreq: CHEM 101/101A.

This class will allow students to complete CHEM-101LEC/101A without having to demonstrate previous enrollment in high school or CHEM-100 chemistry courses. This is an accelerated option to help students who need higher level Chemistry to take the first two years of college Chemistry at MCC.

This course is also designed to provide supplemental instruction to students who have been away from chemistry sometime and/or need additional instruction with their first college chemistry course. This course is taken concurrently with CHEM-101LEC/CHEM-101A.

**CHEM 102LEC**

**General and Inorganic Chemistry**

4 Cr. Hrs. – 4 Contact Hrs. **WSO**

Prereqs: CHEM 101LEC and CHEM 101A

Coreq: CHEM 102A

Topics of the course are kinetics, chemical equilibrium, acid-base chemistry, nuclear chemistry, electro chemistry, some introductory organic chemistry as well as advanced topics from thermodynamics (including entropy, spontaneity and free energy). Successful completion of CHEM 102A is required for transfer credit in CHEM 102.

**CHEM 102A**

**General and Inorganic Laboratory**

1 Cr. Hr. – 3 Contact Hrs. **WSO**

Prereqs: CHEM 101LEC and CHEM 101A

Coreq: CHEM 102LEC

Course divided between elementary qualitative analysis and laboratory theory and practice of topics covered in CHEM 102LEC.

**CHEM 109LEC**

**Chemistry for Health Science**

4 Cr. Hrs. – 4 Contact Hrs. **WSO**

Recommended Prereqs: Math 098 or higher with a grade of C or better OR completion of Algebra II from high school with a grade of C or better

Coreq: CHEM 109A

This is a chemistry course for non-science majors and some students going into specific health programs which do not require general Chemistry 101 and 102. The course is designed to provide students insight into the chemical sciences, technology, and the environment. Conversions, atomic structure, bonding, the periodic table, chemical reactions, energy, organic chemistry, nuclear chemistry, acids and bases, carbohydrates and lipids (biochemistry) are covered. This course is not equivalent to a two semester general, organic, biochemistry course.

**CHEM 109A**

**Chemistry for Health Science Lab**

1 Cr. Hr. – 3 Contact Hrs. **WSO**

Recommended Prereqs: Math 098 or higher with a grade of C or better OR completion of Algebra II from high school with a grade of C or better

Coreq: CHEM 109LEC

An introductory, one semester laboratory course in chemistry. This is the lab component of Chemistry 109 for non-science majors and some students going into specific health programs which do not require general Chemistry 101 and 102. The course is designed to provide students insight into the chemical sciences, technology, and the environment. Conversions, atomic structure, bonding, the periodic table, chemical reactions, energy, organic chemistry, nuclear chemistry, acids and bases, carbohydrates and lipids (biochemistry) are covered. This course is not equivalent to a two semester general, organic, biochemistry course.
CHEM 201E
Organic Chemistry Lecture
4 Cr. Hrs. – 4 Contact Hrs. [F] (Summer on demand)
Prereqs: CHEM 102LEC and CHEM 102A
Coreq: CHEM 201F
Course covers the nomenclature, preparation, properties and reactions of saturated and unsaturated hydrocarbons, aldehydes, ketones, acids and their derivatives. Stereo chemistry and IR, ultraviolet spectroscopy are also introduced.

CHEM 201F
Organic Chemistry Laboratory
1 Cr. Hr. – 4 Contact Hrs. [F] (Summer on demand)
Prereqs: CHEM 102LEC and CHEM 102A
Coreq: CHEM 201E
Laboratory work includes the synthesis of compounds representing typical reactions, together with study of the chemical and physical properties and IR spectra of the substances prepared. Both macro and micro-scale techniques are employed.

CHEM 202F
Organic Chemistry Lecture
4 Cr. Hrs. – 4 Contact Hrs. [W]
Prereqs: CHEM 201E and CHEM 201F
Coreq: CHEM 202G
A continuation of CHEM 201. Course covers nomenclature, preparation, properties and reactions of aromatic hydrocarbons, phenols, organic nitrogen and sulfur-containing compounds, carbohydrates, proteins and synthetic polymers. Nuclear magnetic resonance spectroscopy are also introduced.

CHEM 202G
Organic Chemistry Laboratory
1 Cr. Hr. – 4 Contact Hrs. [W]
Prereqs: CHEM 201E and CHEM 201F
Coreq: CHEM 202F
Laboratory work includes Diels Alder and ylid reactions, a multi-step synthesis, qualitative analysis of typical organic compounds using spectral evidence as well as simple tests.

College Success Center
(See English, Mathematics, and Reading)

College Success Seminar

CSS 100A
College Success Seminar
3 Cr. Hrs. – 3 Contact Hrs. [W] [S]
Prereq: None
This course helps students develop, apply, and evaluate their own skills, abilities, and behaviors to achieve academic and personal success: effective note taking, productive study skills & test preparation, reading and remembering, critical thinking, library skills, navigating online course content, free career and job resources, stress management, relationships, connecting with campus resources, and winning attitudes. Students are required to utilize a minimum of 2 campus resources or attend 2 college events outside of class; they may choose from a variety of options on campus, online, or at off-campus locations. Most are free with student ID.

212 - 2023 - 2024 Muskegon Community College Catalog
Communications

COM 101
Oral Communications
3 Cr. Hrs. – 3 Contact Hrs. Fall Winter Spring
Prereq: None
An introduction to the fundamentals of oral communications. Study and application of intra personal, interpersonal, small group, and public speaking. Class presentations are required.

COM 102
Mass Media
3 Cr. Hrs. – 3 Contact Hrs. Fall
Prereq: None
To create an awareness and understanding of the history, structure and effect of mass media systems. (Includes newspapers, film, radio and television.)

COM 107
Introduction to Journalism
3 Cr. Hrs. – 3 Contact Hrs. Fall
Prereq: ENG 101
A basic course stressing the news-gathering techniques and news-writing style utilized by newspapers, radio and television. Includes an orientation to style, copy-reading, editing, headline writing, and page layout.

COM 112
Audio Production
2 Cr. Hrs. – 2 Contact Hrs. Fall
Prereq: None
A basic course in the fundamentals, principles, practices, and techniques of radio production. Laboratory hours by arrangement.

COM 113
Practical Radio
2 Cr. Hrs. – 2 Contact Hrs. Winter
Prereq: COM 112
A continuation of COM 112 designed to give the student the opportunity to develop skill and experience at a local radio station.

COM 201
Public Speaking
3 Cr. Hrs. – 3 Contact Hrs. Fall Winter Spring
A consideration of the principles of public speaking with emphasis on the theories of argumentation and persuasion. Class performances required.

COM 203
Introduction to Cinema
3 Cr. Hrs. – 3 Contact Hrs. Fall Winter Spring
Prereq: ENG 102
An introduction to the art of film; the course will include representative foreign and domestic films, at least one documentary film, and several (2-4) experimental and/or underground films. In addition to thematic study of films, the course explores the various elements of movie-making; script, light, sound, color, acting, directing, and editing.

COM 212
Television Production
3 Cr. Hrs. – 4 Contact Hrs. Winter
Prereq: None
A basic course designed to acquaint the student with the principles, practices, and techniques of television production. Within an operating television studio, students gain hands-on experience operating studio cameras, recording devices, a video switcher, lighting, audio mixing, microphone setup, teleprompter, monitors, props, green screens and other accessories. Activities involving scripting, storyboard, editing, safety and security will also be provided.

COM 290CI
Cooperative Internship Program
1 – 4 Cr. Hrs. – Variable Contact Hrs. Fall Winter Spring
Prereq: instructor permission
Note: Student must have a GPA of 2.5 or better with at least 21 credit hours successfully completed within the core requirements and 30 credit hours completed toward degree completion, and a recommendation from department faculty.
The Cooperative Internship Program is a paid or non-paid work experience in broadcasting/multimedia within the student’s major area of study. Variable credit hours (1-4 Cr. Hrs. per semester) may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired; however, the number of credit hours which can be applied toward a degree/certificate depends on the student’s course of study and departmental requirements. The internship course starting and ending dates are determined on an individual basis. This course is offered on a pass/no pass basis.

### Computer-Aided Drafting and Design

#### CAD 110
Introduction to Computer-Aided Drafting (2D)
3 Cr. Hrs. – 6 Contact Hrs.  FWSO
Prereq: None
This course is an introduction to basic computer-aided drafting using AutoCAD™. Basic 2D CAD drafting skills will be the primary focus of this course.

#### CAD 135A
Engineering Graphics
3 Cr. Hrs. – 6 Contact Hrs.  W
Prereq: CAD 110 (Must pass CAD 110 with a C- or better grade)
The essentials of Engineering Graphics include working assembly drawings and the essentials of descriptive geometry. Included in this is the utilization of section and auxiliary views to create better illustrations of parts and assemblies. Emphasis will be on manufacturing processes for development of mechanical components including threads, gears and cams.

#### CAD 150
Blueprint Reading
3 Cr. Hrs. – 4 Contact Hrs.  FWSO
Prereq: None
This course is designed to teach students how to read and interpret engineering drawings.

#### CAD 151
Geometric Dimensioning & Tolerancing
3 Cr. Hrs. – 3 Contact Hrs.  W
Prereq: CAD 150 or instructor permission
This course is designed to teach how to read, interpret, and apply geometric dimensioning and tolerancing per ANSI Y14.5M standards.

#### CAD 210
Parametric Design I – Part Modeling
3 Cr. Hrs. – 6 Contact Hrs.  FWO
Prereq: CAD 110 with a grade of C- or better or instructor permission
This course is an introduction to 3-D modeling and parametric design. Working and presentation drawings will be produced, and rendering fundamentals will be presented.

#### CAD 220A
Parametric Design II – Assemblies
4 Cr. Hrs. – 6 Contact Hrs.  FO
Prereq: CAD 210
This course covers advanced part modeling concepts and multiple part assemblies. Rendering and animation fundamentals will be presented.
**CAD 250**  
*Introduction to SolidWorks®*  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: CAD 110 with a grade of C- or better or instructor permission  
This course is an introduction to 3D modeling and parametric design using SolidWorks®. Working and presentation drawings will be produced, and rendering fundamentals will be presented.

**CAD 254**  
*SolidWorks® II*  
4 Cr. Hrs. - 6 Contact Hrs.  
Prereq: CAD250 “previous” with a C- or better  
This course is for the student who has completed the introductory course to SolidWorks. This will further advance the student understanding of parametric design. This course covers advanced part modeling concepts and multiple part assemblies. This includes Sheet Metal Design, Design Tables, Weldments, Surface Modeling, and Mold Designs. Rendering, animation, and simulation fundamentals will be presented.

**CAD 255**  
*Introduction to Siemens NX*  
3 Cr. Hrs. - 6 Contact Hrs.  
Prereq: CAD 110 with a grade of a C- or better or instructor permission  
This course is designed for the student that has mastered two-dimensional CAD drawing. The student will be introduced to feature based 3D parametric solid modeling using the NX software. The course covers all major environments of NX with a thorough explanation of all tools, options, and their applications to create real-world products.

**CAD 260**  
*CAD Capstone*  
4 Cr. Hrs. - 6 Contact Hrs.  
Prereq: CAD 210  or CAD250 “Previous”  
This capstone course will require the students to work in groups using project management methodology to complete projects in two main areas Design of products and Design of tooling and fixtures.

**CIS 100**  
*Introduction to Personal Computers*  
1 Cr. Hr. – 1 Contact Hr.  
Prereq: None  
This course introduces students to the proper use and operation of the Intel-compatible microcomputers using the Windows operating system. Students learn to create documents using word processing programs, create line art using graphic programs, send and receive email with attachments, access the Internet using a browser, and use online course management software. Common system activities that include customizing the desktop, formatting disks, using file management procedures, and creating back-ups are a part of the introduction to personal computer operating procedures.

**CIS 100L&L**  
*Introduction to Personal Computers with Lab*  
1 Cr. Hr. – 2 Contact Hrs.  
Prereq: None  
This course is designed for students with little to no experience with computers. Students have an extra lab hour with their instructor to meet the same objectives as CIS 100. This course introduces the student to the proper use and operation of the Intel-compatible microcomputers using the Windows operating system. Student learn to create documents using word processing programs, create line art using graphic programs, send and receive email with attachments, access the Internet using a browser, and use online course management software. Common system activities that include customizing the desktop, formatting disks, using file management procedures, and creating back-ups are a part of the introduction to personal computer operating procedures.
CIS 101EW
Introduction to Electronic Spreadsheets
1 Cr. Hr. – 1 Contact Hr. ❍<color>EW</color>
Prereq.: CIS 100 or CIS 110 or CIS 120 A
This is a “hands-on” course designed for people with little or no previous experience with electronic spreadsheets. The student will create and edit worksheets and workbooks. The student will use basic formulas, functions, charting, formatting, and printing options to create functional worksheets. Suffix: EW stands for Excel for Windows.

CIS 102EW
Intermediate Electronic Spreadsheets
1 Cr. Hr. – 1 Contact Hr. ❍
Prereq.: CIS 101EW
The student will use advanced formulas and functions, built-in data and table features, and perform what-if analysis using solver and scenarios. Advanced charting and formatting skills will also be covered. Suffix: EW stands for Excel for Windows.

CIS 104A
Intro to Networks (CISCO 1) ❍
4 Cr. Hrs. – 4 Contact Hrs
Prereq.: CIS 120 A previously or concurrently
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build and test simple LANs, perform basic configurations for routers and switches, and implement IPv4 and IPv6 addressing schemes. This is the first course in a series of four courses at MCC that prepares students for CISCO CCNA certification.

CIS 105A
Switching & Routing (CISCO 2) ❍
4 Cr. Hrs. – 4 Contact Hrs
Prereq. CIS 120 A previously or concurrently CIS 104 A (C-or higher required).
Please note: Students will be allowed to register for both CIS 104 A and CIS 105 A at the same time, however if he student does not pass CIS 104 A with at least a C-or higher they will not be allowed to continue on with CIS 105 A.

This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with VLANs, inter-VLAN routing, STP and FHRP’s. Students will also learn the basics of security in WLANs and network switches to configure devices using security best practices. This is the second course in a series of four courses at MCC that prepares students for CISCO CCNA certification.

CIS 106
Google Apps
3 Cr. Hrs. – 3 Contact Hrs. ❍<color>FW</color>
Google Apps is an introduction to the many applications offered by Google. Students will be given real-world projects using these applications to increase their skills needed for productivity, collaboration, and communication. Activities focus both on individual applications and the integration of these applications. Google Apps include (but not limited to): Gmail, Google Calendar, Drive, Docs, Sheets, Forms, Slides, Hangouts, sites, Groups, and Maps.

CIS 109A
CompTIA A+ Part A
2 Cr. Hrs. – 3 Contact Hrs. ❍<color>FO</color>
Prereq.: CIS 110 or CIS 120 A
Note: CIS 110 or CIS 120 A may be taken concurrently with CIS 109 A
This course provides students with the necessary skills to diagnose, update, and repair the physical components of a personal computing device. Students will become comfortable with the replacement of all internal components such as motherboards, processors, memory, and storage devices. Students will also work with I/O devices, the setting up and troubleshooting of small networks and be introduced to the setting up and working with mobile devices.
CIS 110
Computer Concepts
3 Cr. Hrs. – 3 Contact Hrs.
A survey course on computer concepts and applications associated with the current generation of computer technology. In addition, technological trends and the potential impact computers have on careers and lifestyles are discussed. Computer Concepts also provides hands-on work with computers through the introduction of commonly used application packages—word processing, electronic spreadsheets, presentation graphics, image editing, and Internet browsing software within the Windows operating environment. Students interested in business applications and the introduction to computer programming should enroll in CIS 120A Introduction to Computer Information Systems.

CIS 115WW
Introduction to Word Processing
1 Cr. Hr. – 1 Contact Hr.
Prereqs: BUS 179 and one of either CIS 100, CIS 110, or CIS 120A
This is a hands-on course designed for people with little or no experience with word processing. The student will create, edit and format professional-looking documents. These documents will include templates, themes, styles, tables and graphics. Suffix: WW stands for Word for Windows.

CIS 119PP
Introduction to Presentation Graphics
1 Cr. Hr. – 1 Contact Hr.
Prereqs: CIS 100 or CIS 110 or CIS 120A
This is a “hands-on” course designed for people with little or no previous experience with slide show management. The student will design professional-looking slide shows using themes, animation, slide transitions, graphics, sound, and video. Suffix: PP stands for PowerPoint for Windows.

CIS 120A
Introduction to Computer Information Systems
3 Cr. Hrs. – 3 Contact Hrs.
Note: Completion of BUS 179 or equivalent recommended
A business-oriented introduction to data processing principles and information systems. Course topics include the analysis and design of business computer systems, the components of a computer system, the capabilities and limitations of computer technology, and careers for the information age. Students work with computers by learning to operate Internet browsers, electronic spreadsheets, and database systems within the Windows operating environment along with programming computers using popular programming languages. Students are expected to be able to use word processing software before enrolling in this course. This course was formerly offered as CIS 120A: Introduction to Data Processing.

CIS 121
File Design and Utilities for Midrange Computers
1 Cr. Hr. – 1 Contact Hr.
Prereq: CIS 120A
Note: With instructor permission, CIS majors may take CIS 120A concurrently.
This course introduces students to the fundamentals of file design in a midrange computing environment. Students learn a midrange data definition language and use the utilities of a midrange operating system to create and maintain physical and logical files, database relationships, and queries.

CIS 124
Introduction to Game Development
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: CIS 120A
This class will provide an overview of the game industry which includes game history, analyzing the psychological reasons why people play games, understanding the different types of games and their history, how games are developed, how game designs are influenced by their business models, and identifying the salient features of a game and how they relate to human needs and fluidly of play. A full understanding of graphics evolution, game play example, and systems evolutions are explored. Students experience in collaborative groups how to propose game ideas, and work through game concepts and features. Class goals are to impart...
to the student a fluency in understanding of how games are created, what influences how a game is developed and be able to identify industry specific areas of focus that will align with their personal interests and skills.

CIS 131
Operations and Commands for Mid-range Computers
1 Cr. Hr. – 1 Contact Hr. W
Prereq: CIS 120A
This course introduces students to a midrange operating system. Students learn fundamental skills necessary to interface with the system, including using control language commands, prompting, and handling job queues, output queues, and messages. Students will also become familiar with the operating system’s architecture, and will be briefly introduced to control language programming.

CIS 142
Windows Client Administration
3 Cr. Hrs. – 3 Contact Hrs. F
Prereq: CIS 110 or CIS 120A
This course prepares students for Windows client administration on a network and supporting users in an enterprise environment. Students will prepare for a certification exam by studying three major topics areas. First, implement Windows to include preparing installation requirements, installing Windows, configuring devices and drivers, performing post-installation configuration, and implementing Windows in an enterprise environment. Second, configure and support core services to include configuring of networking, storage, data access and usage, remote management, along with implementing apps. Third, manage and maintain Windows to include configuring update, system and data recovery, authorization and authentication, advanced management tools as well as monitor windows.

CIS 143A
Windows Server Admin I
3 Cr. Hrs. – 3 Contact Hrs. F
Prereq: CIS 110 or CIS 120A
This course provides preparation for a Microsoft Windows Server certification exam towards MCSA (Microsoft Certified Solutions Associate). This course provides for the installation, practice, and working with the Microsoft Server operating system. Students will study and prepare for certification topics such as: planning for server deployment, the ability to work with PowerShell commands, monitoring and maintaining servers, working with server roles, working with server storage and file systems, and server virtualization.

CIS 153A
Database Management - Access
1 Cr. Hr. – 1 Contact Hr. W
Prereq or Coreq: CIS 110 or CIS 120A
This is a hands-on course designed for people with little or no experience with database management software. The student will create, manipulate and query relational databases along with developing data entry forms and reports.

CIS 170
RPG Programming
3 Cr. Hrs. - 3 Contact Hrs. F
Prereq: CIS 121
This course covers fundamentals of designing and developing computer programs written using the RPG IV programming language. Topics include program logic, arithmetic operations, decision-making structures, external input and output definitions, sequential processing of batch files, and an introduction to interactive programming. Students design, write, test and document RPG IV programs within the IBM i operating environment.

CIS 183
Networking Technologies
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: CIS 110 or CIS 120A
This course focuses on essential issues related to data communications and networking technologies. Topics include established networking standards and terminology, the OSI model, physical and logical network topologies, the use and function of various networking hardware, media, protocols, and the fundamentals of inter-networking.
CIS 185
C Programming
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: CIS 120A
Note: With instructor permission, CIS majors may take CIS 120A concurrently.

The major elements of the C programming language are introduced through a series of applications featuring C program structure, variables, integer and floating point arithmetic, looping, conditionals, arrays, functions, strings, pointers, structures and sequential file syntax. Syntactical, structural and procedural differences of C++ object-oriented methodologies are integrated into the course after a firm foundation in standard C is presented.

CIS 198
Computer Forensics
3 Cr. Hrs. – 3 Contact Hrs.
Prereqs: CIS 120A and CJ 101

This course is designed to introduce the student to the world of computer forensics and cyber crime. The student will gain a basic understanding of the application of computer investigations and analysis techniques in the interest of determining potential legal evidence. (This course is also listed as CJ 198.)

CIS 199
Internet Content Management Systems - CMS
1 Cr. Hr. – 1 Contact Hr.
Prereqs: CIS 257A or CIS 257

Internet Content Management Systems provide system administrators, web designers and content creators an interface for managing online content. This course provides an introduction to these systems (examples of CMS include: WordPress, Drupal, MovableType and Joomla). Students will determine Content Management System (CMS) feature and system requirements, install a CMS from scratch and configure administrative options on the CMS. Administrative functions will include implementation of security and publishing permissions, extension of basic CMS installations through plugins and customization of the CMS through use of design themes for delivery to both traditional and mobile users. Students will use their CMS installation to create and maintain both static and dynamic content throughout the course.

CIS 202A
IT SEC & Automation (CISCO 3)
4 Cr. Hrs. – 4 Contact Hrs.
Prereq: CIS 105A (with a passing grade of C- or higher).

This course continues to describes the architecture, components, security, and operations of routers and switches in larger and more complex networks including Wide Area Networks. Students will learn to configure single area OSPF, explain vulnerabilities, threats, and exploits and how that can be mitigated to enhance network security. Learn how to implement ACLs, NAT, IpSEC VPNs, QOS, learn how to monitor today’s networks, learn troubleshooting techniques and skills, and learn how to network automation and virtualization are used in today’s networks. This is the third course in a series of four courses at MCC that prepares students for CISCO CCNA certification.

CIS 204
CCNA Cybersecurity CISCO 4
4 Cr. Hrs. – 4 Contact Hrs.
Prereq: CIS 202A (with a passing grade of C- or higher)

Note: Students will be allowed to register for both CIS 202A and CIS 204 at the same time, however, if the student does not pass CIS 202A with at least a C- or higher they will not be allowed to continue with CIS 204

Today’s organizations are challenged with rapidly detecting cybersecurity breaches and effectively responding to security incidents. Teams of people in Security Operations Centers (SOCs) keep a vigilant eye on security systems, protecting their organizations by detecting and responding to cybersecurity threats. This course prepares students to begin a career working with associate-level cybersecurity analysts within both security operations centers, and as part of a network security team at an organization.
CIS 209A
CompTIA A+ Part B
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: CIS 109A
This course is designed to take the successful CIS109A student to the next, more in-depth level of personal computer maintenance and repair. Students will become comfortable with the installation (including virtualization), troubleshooting and maintenance of operating systems, peripheral devices, and system security strategies. It is recommended that students complete CIS143 prior to taking the CompTIA A+ exam.

CIS 228
JavaScript
3 Cr. Hrs. – 3 Contact Hrs. F
Prereq: CIS 257A
Students will learn how to program using JavaScript and implement scripts on web pages. In addition to JavaScript, students will develop utilizing HTML and CSS. Students will utilize JavaScript frameworks, integrate external API’s as well as develop efficient user interfaces. Students will work with the Document Object Model (DOM) and will utilize JQuery, Ajax and JSON.

CIS 243
Telecommunications
3 Cr. Hrs. – 3 Contact Hrs. F
Prereq: CIS 120A or CIS 110
This course provides an introduction to telecommunication concepts and network configurations. Students learn standard procedures and protocols for data transmission over various communication channels and study the components of a telecommunications system. Network architectures and designs are examined through the use of discussion and case studies.

CIS 244
Game Scripting
3 Cr. Hrs. – 3 Contact Hrs. F
Prereq: CIS 282 or CIS 185
The students will work independently and in teams to design, create and code game systems for current games on the market. Focus will be put on how to create scripts that address the logic behind combat systems, implementing expert systems and artificial intelligence, implementing conditional and branching conversations, event triggers, creation of timed events, and how to create dynamic game environments. Further there will be discussion on version control, software configuration management, software development methodologies and how to successfully work in distributed development environments.

CIS 250
Developing Information Systems
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: CIS 282 or CIS 170 or CIS 185 or CIS 267PHP
Note: With instructor permission, any of the prerequisite courses may be taken as a corequisite.
This course reviews and applies traditional systems development methodologies implemented by project teams. Classroom discussion centers on the design and development of user-oriented information systems. Course content includes feasibility studies, systems analysis, design concepts, and implementation strategies.

CIS 253A
Database Design and Implementation
3 Cr. Hrs. – 3 Contact Hrs. W
Prereqs: CIS 153A and students are encouraged but not required to take some programming language before this class.
This course provides students with systems development experience within a database environment. Fourth-generation languages using structured query language (SQL), report generators, and other system design tools are used in conjunction with case studies to provide real-life applications of the systems development process.

CIS 257A
HTML for Internet Web Page Design
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: CIS 110 or CIS 120A
Note: With instructor permission, either of the prerequisite courses may be taken as a corequisite.
Students will learn the fundamentals of the Hypertext Markup Language (HTML5), CSS and web page design. Students will use Internet browsers, image editors, IDEs and text editing software to create and edit web pages for traditional computers and mobile devices. They will also learn to create a web page and publish a website on the Internet using File Transfer Protocols (FTP). Students will be expected to critique other web pages and, there will be
demonstrations of JavaScript, the DOM model and other Internet tools.

**CIS 258**  
**Advanced HTML Web Development**  
3 Cr. Hrs. – 3 Contact Hrs.  
*Prereq: CIS 257A or CIS 257*

HTML provides the foundation of web pages on the Internet. This class assumes a basic understanding of basic HTML and CSS. In this class students will use a project-driven approach to learn advanced techniques that will bring together the student’s knowledge of basic HTML, CSS and Web design. Using HTML5 students design, build and launch interactive, multi-media web-based applications for mobile, notebook and desktop audiences.

**CIS 267**  
**PHP Server-Side Web Programming Using PHP**  
3 Cr. Hrs. – 3 Contact Hrs.  
*Prereq: CIS 257A or CIS 257*

This course is an introduction to the server-side scripting language for use in the creation and maintenance of interactive web sites that access online databases. Students design, code, test, debug and navigate interactive web sites using server-side programming. Topics will include broad exposure to language-specific functions and processes, security and file uploads and writes, along with database functionality including reads, writes, selects (searches), inserts and updates. This technology is widely used within Internet applications including blogs, search engines, e-commerce shopping carts, discussion forums, content management systems and social networking platforms.

**CIS 270A**  
**Advanced RPG Programming**  
3 Cr. Hrs. - 3 Contact Hrs.  
*Prereq: CIS 170*

This course is a capstone course in midrange programming. Topics include interactive applications, file maintenance, procedures, sub-procedures, modular programming, subfiles, embedded SQL, and other emerging IBM technologies used by industry. Students design, write, test and document RPG IV programs in a midrange operating environment.
CIS 282
Visual C# Programming
3 Cr. Hrs. – 3 Contact Hrs. [W]
Prereq: CIS 280 or instructor permission
The C# programming language, from Microsoft, will be introduced to the students from within the .NET framework. Students will study, design and write programs in the object-oriented format while becoming familiar with the fundamentals of C# and of the .NET environment. The C# (C Sharp) programming language, from Microsoft’s Visual Studio (VS) development framework, is introduced and then used to present the visual programming environment, the object-oriented programming environment and the .NET environment. Students will learn to work with the VS interface to develop skills in developing projects and managing objects. Programming techniques will focus on decisions, looping, data management, and exception management.

CIS 283B
Windows Server Admin II
3 Cr. Hrs. – 3 Contact Hrs. [W]
Prereq: CIS 143A
This course provides preparation for Microsoft Server certification exams towards MCSA (Microsoft Certified Solutions Associate). This course provides for preparation and practice of certification exam topics such as: implementing, managing, and maintaining IP addressing, maintaining name resolution using the Domain Name System (DNS), installing and working with Dynamic Host Configuring Protocol (DHCP), implementing routing and remote access, installation and configuration of Active Director Domain Services (AD DS), working with Organization Units (OUs) and managing group polices.

CIS 284
Interactive Media and Game Design
3 Cr. Hrs. – 3 Contact Hrs. [W]
Prereq: CIS 124
This class is the capstone course for any degree track within the Interactive Media and Game Design curriculum. Students will work in a collaborative team, from initial concept through final release in a single game development cycle to develop a game modification to an existing professionally published work. Students will work on professional grade tools, will face all of the challenges, decision points and experience of creating a published game. This includes initial concept, storyboarding, game scripting, voice acting, art creation, writing, game design, map design, level design, 3D modeling, model rendering, as well as community management, project management and product placement. The course goal is to create a published “Mod” that will become a cornerstone for the students published portfolio as a referenced published work.

CIS 287A
Digital Video Editing
3 Cr. Hrs. – 3 Contact Hrs. [W]
Prereq: CIS 110 or CIS 120A
This course serves as an introduction to video editing on the PC. Topics covered include importing still and video images, audio editing, cutting scenes, transitions, basic and advanced titling, compositing, slow and fast motion, color balance, and exporting projects to a variety of industry-standard formats. Additional costs include a pair of stereo headsets and removable read/write storage media as dictated by the current syllabus.

CIS 293A
Network Security
3 Cr. Hrs. – 3 Contact Hrs. [W]
Prereq: CIS 183
This course is offered as a lecture/hands-on course relative to computer network security. The class will cover the core objectives of the Security + certification exam including: the knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques, and participate in risk mitigation activities. Among the topics covered will be the core knowledge required to support the principles of confidentiality, integrity, and availability.
Criminal Justice

CJ 101
Introduction to Law Enforcement
3 Cr. Hrs. – 3 Contact Hrs. F,W,S,O
A study of the organization and jurisdiction of local, state, and federal law enforcement, judicial, and correctional systems. Also includes the history and philosophy, career opportunities and qualifying requirements, terminology and constitutional limitations of the system.

CJ 102
Police Administration I
3 Cr. Hrs. – 3 Contact Hrs. W,O
Prereq: None
A study of the principles of police administration and organization; administration of staff units; function and activities of Criminal Justice Agencies.

CJ 104
Criminology
3 Cr. Hrs. – 3 Contact Hrs. F,W,S,O
The study of deviance and society’s role in defining behavior. Theories of criminality and the economic, social, and psychological impact of crime, victimization, and relationship between statistics and crime trends.

CJ 109
Crime Prevention and Juvenile Delinquency
3 Cr. Hrs. – 3 Contact Hrs. F,W,O
Prereq: None
A practical study of the history and development of juvenile justice theories, procedures and institutions. Problems of juvenile delinquency, theories of causation and prevention programs. Police prevention programs, juvenile courts, federal, state and local treatment and prevention.

CJ 110
Defensive Tactics
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: None
The focus of attention in this course will be the use of basic techniques. Each technique demonstrated by the instructor will have a variety of uses. All techniques will be designed to incapacitate the object of focus as quickly and professionally as possible. The importance of documentation followed by court testimony techniques will be strictly emphasized throughout the entire course.

CJ 130
Tactical Communication
3 Cr. Hrs. – 3 Contact Hrs. D
Prereq: None
The class focuses on a basic introduction to tactical Spanish with an emphasis on commands and informational phrases for Emergency and Law Enforcement personnel. This allows them to handle situations, to acquire information about what they see, and to read necessary information to others in Spanish.

CJ 198
Computer Forensics
3 Cr. Hrs. – 3 Contact Hrs. D
Prereq: CIS 120A and CJ 101
This course is designed to introduce the student to the world of computer forensics and cyber crime. The student will gain a basic understanding of the application of computer investigations and analysis techniques in the interest of determining potential legal evidence. (This course is also listed as CIS 198.)

CJ 201
Criminal Law
3 Cr. Hrs. – 3 Contact Hrs. F,W,O
Prereq: None
The study of the philosophy of legal sanctions and their historical development, from common law to modern American criminal law. Includes the judicial process, classification of crimes, elements of and parties to crimes, general definitions of crimes, and common defenses.
CJ 202
Police Administration II
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: None
The study of theories, procedures and methods of operation of public police with emphasis on discretionary powers. This course is a study of the administration of police line operations; including theories, types and methods of patrol, liaison between units, enforcement policy, manpower distribution and analysis of operations. We will discuss the operation of the detective and juvenile divisions and such problems as organized crime, vice, etc. Also includes a review of career opportunities and current trends in law enforcement.

CJ 204
Criminal Investigation
3 Cr. Hrs. – 3 Contact Hrs. WSO
Prereq: None
An introduction to criminal investigation procedures including theory of investigation, conduct at crime scenes, collecting and preservation of criminal evidence. Methods in the use of police science laboratory, fingerprinting, ballistics, documents, report writing and procedures in the courtroom are covered. Additionally, study in case preparation, interviewing, and basic investigative techniques will be included.

CJ 205
Interrogation and Case Preparation
3 Cr. Hrs. – 3 Contact Hrs. F
Prereq: None
Comprehensive study of Miranda decision; principles of psychology of questioning, interrogation of suspects, interviewing witnesses and informants, preparation of statements, declarations and confessions, problems in case preparation, and mechanical means of deception.

CJ 206
Evidence and Criminal Procedure
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: None
This course deals with rules of evidence of particular import at the operational level in law enforcement and with criminal procedures in important areas such as arrest, force and search and seizure. An introduction to major court holdings, procedural requirements that stem from these holdings, and their effects on daily operations of the criminal justice system.

CJ 207
Police and Community Relations
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: None
The primary objective of this course is to acquaint the student with the need for the police to become a part of the community rather than apart from it. An examination of the attitude of people towards the police, as well as the feelings of the police about the community they are sworn to protect will be made. Public relations will be distinguished from community relations. The image of the police will be examined as well as the current methods being used by police agencies to better their relations with the community. A study of the police officer’s role in attaining and maintaining public support. Including recognition and understanding of community problems, community action programs, methods of coping with crisis situations, victimology, ethics and minority cultures, environments, crime prevention and police operations.

CJ 208
Police Science Laboratory I
3 Cr. Hrs. – 3 Contact Hrs. D
Prereq: None
General course in police laboratory techniques: photography, recording the crime scene, collection and preservation of evidence and fingerprints, development of studies in the area of firearms, hair microscopy and chemistry.

CJ 250
Corrections I
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: None
History, development and philosophy of corrections; tribal and biblical antecedents; Western adaptations; developments in the U.S.; current forms and approaches to include probation, parole, medium security concepts; the work of related agencies.

CJ 251A
Legal Issues in Corrections
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: None
Exploration of probation, sentencing and philosophies, legal concepts applicable to probation, parole, sentencing and incarceration; objectives of the correctional process and factors influencing correctional decision-making.
CJ 290CI
Criminal Justice Cooperative Internship
Variable 1-4 Cr. Hrs. FWS
Prereq: Instructor permission
Note: The student must have a GPA of 2.5 or higher. The student must have completed a minimum of 6 credit hours in their major field of study and 30 credit hours toward a degree.

The Cooperative Internship Program is a paid or non-paid fieldwork experience in the industry within the student’s major area of study. Variable credit (1-4 cr. hrs. per semester) may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired, however, the number of credit hours which can be applied towards a degree/certificate depends on the student’s course of study and departmental requirements. The maximum number of hours of cooperative internship is 12 credit hours depending upon the program. This course is offered on a pass/no pass basis.

CJ 257
Client Relations in Corrections
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: None
This course is designed to provide a basic understanding of the meaning and function of culture, the impact and meaning of discrimination and discussion of the various minorities represented in the State of Michigan. Attitude formation, including such topics as self-perception, human relations and group and peer pressure will be studied. Affirmative action will be highlighted.

CJ 258A
Client Growth and Development
3 Cr. Hrs. – 3 Contact Hrs. W
Prereq: None
This course is designed to examine the growth and development of the correctional client, with particular emphasis on early environment, psychological and sociological factors. Specific problems such as substance abuse, sexual deviations, medical disorders and mental disorders will be discussed. Intervention strategies will be considered.
Dance

**DNC 100**
**Modern Dance I**
*1 Cr. Hr. – 2 Contact Hrs.*
Basic exercises and technique for the beginning student in modern dance. Movement, rhythmic and compositional forms will be studied.

**DNC 101**
**Modern Jazz Dance I**
*1 Cr. Hr. – 2 Contact Hrs.*
Basic dance exercises, technique, and jazz sequences will be taught in this course. Students will gain the ability to recognize appropriate music and various phases of jazz dance history.

**DNC 102**
**Ballet I**
*1 Cr. Hr. – 2 Contact Hrs.*
Beginning and intermediate level ballet dance exercises, techniques, and ballet dance sequences will be taught in this course.

**DNC 106**
**Social Dance**
*1 Cr. Hr. – 2 Contact Hrs.*
Beginning dance steps and techniques relating to social dance, including ballroom and contemporary novelty dances. A study of the history, music and rhythms that are related to social dance.

**DNC 138**
**Dance Choreography and Design**
*1 Cr. Hr. – 2 Contact Hrs.*
Application of choreographic knowledge in the design of a dance work to include the principles of dance composition, direction and performance.

**DNC 200**
**Modern Dance II**
*1 Cr. Hr. – 2 Contact Hrs.*
Prereq: DNC 100
Intermediate work in modern dance composition and technique. History of modern dance is also studied as well as different dance forms used in composing dance.

**DNC 201**
**Modern Jazz Dance II**
*1 Cr. Hr. – 2 Contact Hrs.*
Prereq: DNC 101
Continuation of beginning and intermediate level jazz dance exercises, techniques and sequences will be taught in this course.

**DNC 206**
**Social Dance**
*1 Cr. Hr. – 2 Contact Hrs.*
Prereq: DNC 106
Intermediate dance steps, variations, and techniques relating to social dance, including ballroom and contemporary novelty dances. A study of history, music and rhythms that are related to social dance. Field trips to either a dance club or workshop in social dance are offered with this course and an additional fee may be required.

**DNC 210 A-D**
**Repertory Dance Tour Company**
*2 Cr. Hrs. – 4 Contact Hrs.*
Prereq: None
Credit will be given for practical work as a dancer for participating in the Repertory Dance Tour Company. This company will tour area schools, organizations, institutions, etc., presenting creative and educational aspects of performing dance. Performing dance positions by audition only prior to class registration.

**DNC 210A - First Semester**
**DNC 210B - Second Semester**
**DNC 210C - Third Semester**
**DNC 210D - Fourth Semester**
Digital Music

DMU 101
Audio Recording I
3 Cr. Hr. – 3 Contact Hrs. 🗓️
An introduction to the fundamental principles, practices, and techniques of audio and music production.

DMU 102
Audio Recording II
3 Cr. Hr. – 3 Contact Hrs. 🗓️
Prereq: DMU 101 with a grade of “C” or better.
A study of audio signal processing theory, history, and application using current industry standard technology. Includes an emphasis on developing skills in the operation of hardware and software to manipulate digital audio recordings.

DMU 103
Audio Recording III
3 Cr. Hr. – 3 Contact Hrs. 🗓️
Prereq: DMU 102 with a grade of “C” or better.
Advanced application of audio production techniques, including editing and effects, project planning and mixing.

DMU 104
Live Audio Production
3 Cr. Hr. – 3 Contact Hrs. 🗓️
Prereq: DMU 101
This course will provide the student with an understanding of the goals, objectives, and processes of live sound support. Study will address understanding and use of analogue and digital amplifiers and speakers, mixing for Front-Of-House, monitors, and other destinations, selection of a system to fit the venue, an introduction to speaker positioning and alignment, selection, and use of microphones, reading and following stage plot diagrams, cable management, and basic troubleshooting. Students will meet in a variety of venues.

DMU 110
Introduction to MIDI, FM Synthesis and Sampled Instruments
3 Cr. Hr. – 3 Contact Hrs. 🔔
Prereq: DMU 101
Since the 1980s, MIDI has been the language of communication between digital instruments. Students will learn the essential principles of this language, explore some of the thousands of digital instruments, both synthesized and sampled, and learn to create their own in a state-of-the-art audio studio.

DMU 111
Popular, Fold, and World Music: Form and Style
3 Cr. Hr. – 3 Contact Hrs. ⌚️
Prereq: MU 102
Explore various types of world music and learn how to recreate it in arrangements or composition. Discover other “classical music” traditions (Iran, India, and China), American pop music (jazz, blues, rock, pop, new age), and folk music from around the world. Throughout the survey of these various styles, learn how to analyze unfamiliar music and even how to reproduce it through performance, arrangement, or composition.

DMU 201
Digital Audio Capstone Project
3 Cr. Hr. – 3 Contact Hrs. ⌚️
Prereq: Completion of all previous coursework for audio or music track certification.
The Capstone Project course is the last in the sequence for the Digital Music and Audio Production certification program. The content of the project will be determined by the student under the guidance of faculty. Students in the audio track will focus on the production of professional audio while students in the music track will focus on the creation of a set of recordings of their original compositions.
Economics

ECON 101A
Principles of Macroeconomics
4 Cr. Hrs. – 4 Contact Hrs. FWSO
Recommended: MATH 098 or higher, with a C or better

A course appropriate for economics, social science, business administration, and engineering majors, and any other students interested in how their economic system works. This is a course in macroeconomics, which attempts to show how a market system determines levels of employment and unemployment, and the factors affecting inflation and economic growth. Various theories of the macroeconomy are examined. Government attempts at economic stabilization, including the role of the Federal Reserve System are discussed.

ECON 102A
Principles of Microeconomics
4 Cr. Hrs. – 4 Contact Hrs. FWSO
Recommended: MATH 098 or higher, with a C or better

A course in microeconomics, especially suited for social science, business and engineering majors. Various types of competition and how these affect decision making by the firm are discussed. Price and output determination by the firm are also examined. Other topics include the pricing of resources, the role of trade unions, international trade and finance, income distribution and poverty, and the basic characteristics of the economic systems of selected countries other than the United States.

Education

ED 101B
Introduction to Education
3 Cr. Hrs. – 4 Contact Hrs. FWO
A comprehensive survey of teaching, stressing objectives and philosophy, student guidance, curriculum study, and methods of teaching. Opportunities to explore professional education as a career, responsibilities of educators, cultural awareness within the profession, social issues, directed observation and current trends. Twenty-five hours of fieldwork are required in a Pre-Kindergarten -12th grade classroom.

ED 109A
The Parent-Child Connection
3 Cr. Hrs. – 4 Contact Hrs. FWO
Prereq: None
This course is focused on the cultural influence of the family structure as it relates to education through culturally responsive curriculum and environment. The course will assist in developing an understanding of the parenting process and present content through research-based concepts. Multiple classroom environments and professional roles will be utilized in order to prepare a teacher to communicate with families in a respectful and reciprocal relationship. Twenty-five hours of fieldwork are required in a Birth- 3rd grade classroom.
ED 111A
Introduction to the Early Childhood Education
3 Cr. Hrs. – 4 Contact Hrs. WO
Prereq: None
The course is designed to introduce students to the field of early childhood education and to the academic opportunities within the profession. The course will examine a broad perspective of current issues. Program models, family relationships, behavior management, cultural, historical, philosophical and current trends in early childhood education will be emphasized. Criteria for quality care, exemplary early childhood programs, developmentally appropriate practices, and learning environments – including multi-cultural and special needs – will be examined. Twenty-five hours of fieldwork are required in a center based preschool program with 3-5 year olds.

ED 120C
Anti-Bias Curriculum in Early Childhood
3 Cr. Hrs. – 4 Contact Hrs. WO
An introduction to current practices in early childhood education curriculum as related to the total growth and development of young children. Focused on the Anti-Bias Curriculum, play and consideration for sociocultural environment and family partnerships, curriculum alignment with State of Michigan B-K, Pre-K-3rd, NAECY, Head Start, GSRP, IEP, IFSP and local agencies curriculum models will be utilized for lesson planning. Materials, learning outcomes, guidance, school-family relationships, technology, technology assisted devices, community resources and significant child development research will be explored through developmental learning centers. Twenty-five hours of fieldwork are required in a center based preschool with 3-5 year olds.

ED 200A
Language and Literacy Birth-Five Years
3 Cr. Hrs. – 4 Contact Hrs. WO
Prereq: None
This course will investigate early language and literature development for children birth to five years old. A culturally responsive approach to understanding the diversity of environments, family structure and language opportunities through best research practices and developmentally appropriate practices. The focus will be on overall understanding, preparation, and assessment of diverse language environments, print concepts, phonological awareness, letter knowledge, spelling, word recognition, vocabulary, handwriting, comprehension, composition, listening and speaking. Twenty-five hours of fieldwork are required in a Birth – Kindergarten classroom.

ED 202B
Teaching of Reading in the Elementary School
3 Cr. Hrs. – 4 Contact Hrs. F
Prereq: None
A study of current philosophies, instructional strategies and materials in the teaching of reading from preschool through middle school grades. Key components of literacy will include: print concepts, phonological awareness, phonics, spelling, word recognition, reading, comprehension, handwriting, composition, listening and speaking in multiple diverse environments. Twenty-five hours of fieldwork are required in a Preschool- 6th grade classroom.

ED 210
Child Care and Guidance
3 Cr. Hrs. – 3 Contact Hrs. WO
Prereq: Departmental approval Co-req: ED 252B
This is the culminating course in the early childhood education sequence. Instruction is provided in competency and guidance techniques for the young child. Students will write, have proofed and finalize the six “competency goals.” These are required for the credential, in preparation for the final evaluation. Their autobiography and an individualized training prescription will be written by the field advisor following the on-site observation. Counseling, evaluations and recommendations for the completion of the program are provided. A twenty-five hour practicum is required.
ED 211A
Behavior Management
3 Cr. Hrs. – 4 Contact Hrs.
Prereq: None
A study of current philosophies, instructional strategies and materials in the teaching of reading from preschool through middle school grades. Key components of literacy will include: print concepts, phonological awareness, phonics, spelling, word recognition, reading, comprehension, handwriting, composition, listening and speaking in multiple diverse environments. Twenty-five hours of fieldwork are required in a Preschool- 6th grade classroom.

ED 214A
Infants and Toddlers Development and Care
3 Cr. Hrs. – 4 Contact Hrs.
Prereq: None
The development of the newborn to 36-month old child is examined in this course through current research-based practices. The diversity of development will be explored through the cognitive, language, social, emotional and sensorimotor growth of the infant and toddler. The environments will include Early On, Early Interventions, Early Head Start and center-based programs. Twenty-five hours of fieldwork are required in an Infant-Toddler classroom.

ED 216A
Educating Exceptional Children
3 Cr. Hrs. – 4 Contact Hrs.
Prereq: None
A comprehensive survey of professional research, parental services, trends, policies, procedures and laws in special education. Areas of impairment studied include mental, hearing, visual, physical, emotional, and learning disabled. The exceptionality of gifted and talented and early intervention are examined as well. Twenty-five hours of fieldwork are required in a classroom servicing Part B and C of the Michigan special education requirements.

ED 220B
Early Childhood Observation & Assessment
2 Cr. Hrs. – 3 Contact Hrs.
Prereq: ED 111A
An introduction to techniques and strategies in observing and assessing the behavior, achievement and performance of young children. The importance and value of observations of children, types and varieties of assessment, role of assessment in multicultural settings, use of technology, importance of portfolio development and observation systems will be discussed. Twenty-five hours of fieldwork are required in a center based preschool classroom with 3-5 year olds.

ED 221A
Teaching Students with Learning and Behavior Problems
3 Cr. Hrs. – 4 Contact Hrs.
Prereq: ED 211A
This course is designed to enable students to effectively teach children with learning disabilities and emotional or behavioral impairments. The emphasis is on teaching skills and content areas, methods and procedures, interventions and strategies helpful in educating children at risk. It is highly desirable and recommended for any student who plans to work with special needs children, or in inclusive classrooms. Twenty-five hours of fieldwork are required in a classroom servicing Part B and C of the Michigan special education requirements.
ED 223A  
Child Care Center Administration  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: None  
This course is designed for those who wish to begin a child care business as well as those already engaged in working toward or as a child care center director. It deals with the nature of child care, the challenges and procedures of building a new center, classroom design, and analysis of the problems faced by a start-up business. Emphasis will be placed on solving practical problems, budget/business plan, designing room space and environmental designs. Twenty-five hours of fieldwork are required in a center-based program.

ED 225A  
Child Development  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: None  
The course will explore theoretical and practical perspectives of conception through adolescence development. Basic issues in the development of infants and children, methods of studying children will be discussed. In-depth exploration of the physical, intellectual, emotional, and social development of children will be viewed from a multi-cultural perspective. This course may be used in addition to, or in place of ED250 (Human Growth and Learning) to fill the requirements of all Education Department certificate and degree programs. Twenty-five hours of fieldwork are required in a Birth -6th grade classroom.

ED 230A  
Children’s Literature  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: None  
This course will investigate literature for children, and appropriate learning activities suitable for the preschool, elementary and middle school student. Relationships are explored between child development, school curricula, instructional strategies, language arts, multi-cultural activities, and literature. A focus in selection of quality children’s literature to plan culturally diverse lessons to support learning in the following areas: print concepts, phonological awareness, letter knowledge, spelling, word recognition, vocabulary, handwriting, comprehension, composition, listening and speaking. Twenty-five hours of fieldwork are required in a Preschool-6th grade classroom.

ED 234A  
Educational Psychology  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: None  
This course is devoted to the connection between psychology and education by providing an overview of the applications in the field of psychology. Research data, learning theories, cultural pluralism and special topics reflective of current educational changes are examined. 25 hours of fieldwork within a K-12 classroom environment will be required.

ED 250A  
Human Growth and Learning  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: None  
A comprehensive study of the human life cycle will be explored. The course will explore theoretical and practical perspectives of development from conception through death. In addition, current trends in language acquisition, information processing, learning theories and basic theoretical models will be examined. In-depth exploration through current research of the physical, intellectual, emotional, and social development from childhood to adulthood will be viewed from a multi-cultural perspective. Twenty-five hours of fieldwork are required in a Birth -12th grade classroom.
ED 251A
Health Needs of the Young Child
3 Cr. Hrs. – 4 Contact Hrs. WO
Prereq: None
The emphasis in this course is on identification, treatment, and prevention of common childhood illnesses, and the promotion of good health, safety and nutrition for the young child including cultural awareness. Physical and dental health will be emphasized, along with signs and symptoms of illness within varying age groups. Prevention will be focused on how to promote optimum health, how to prevent injuries, and nutritional requirements of young children. Twenty-five hours of fieldwork are required in a center-based preschool classroom with 3-5 year olds.

ED 252B
Child Development Practicum
3 Cr. Hrs. – 6 Contact Hrs. WO
Coreq: ED 210
Pre-req: Instructor approval with a “C” or better grade in all education courses
On-the-job experience under the supervision of the Education Department with cooperating early childhood locations. Practical application knowledge under the framework of: NAEYC, Council for Professional Recognition, State of Michigan B-K Standards, Head Start, GSRP, and State of Michigan Quality Pre-K Standards. Demonstration of the ability to design and implement curriculum, communicate with families, complete accurate assessment, use of technology, and culturally diverse implementation. A total of 480 hours of fieldwork are required in a center-based preschool with 3-5 year olds.

ED 272A
Education Practicum
3 Cr. Hrs. – 6 Contact Hrs. WO
Pre-reqs: Instructor approval with a “C” or better grade in all education courses
On-the-job experience under the supervision of the Education Department with cooperating school districts. Practical application knowledge under the framework of State of Michigan K-12 Standards. Demonstration of the ability to design and implement curriculum, communicate with families, complete accurate assessment, use of technology, and culturally diverse implementation. Two hundred forty hours of fieldwork are required in a Kindergarten - 12th grade classroom.
Education-Related

(These courses may be used for CDA renewal.)

MATH 105
Mathematics for Elementary Teachers
4 Cr. Hrs. – 4 Contact Hrs. F/W/S
Prereq: Math 097 or MATH 100A with a minimum grade of “C”

Not a “methods” course. A general course for students majoring in elementary education. The basic ideas behind our number system and geometric concepts are discussed. Topics include: problem solving, sets, system of numeration, the real number system, geometry and metric measure.

MU 192
Music for the Classroom Teacher
4 Cr. Hrs. – 4 Contact Hrs. W
Coreq: MU 190C

This course is required for future elementary classroom teachers. No previous musical training is necessary. The course provides a background in the fundamental elements of music through singing, playing classroom rhythm and melody instruments, recorder and autoharp. Includes introduction to methods of teaching music, observation and participation in area schools.

Electricity

ELTC 101AL&L
Electricity-Basic
4 Cr. Hrs. – 6 Contact Hrs. F/W/S
Prereq: None

A theory and activity course designed to introduce the basic relationships between voltage, current, and resistance. Topics include: soldering, DC circuits, volt-ohm-amp meter operation, alternating current, relays, ladder diagrams, residential wiring, and safety. Practical laboratory experiments reinforcing the above topics are provided.

ELTC 103
Residential Wiring
3 Cr. Hrs. – 4 Contact Hrs. W
Prereq: ELTC 101AL&L

A study of the layout, installation and testing of electrical components and circuits found in residential wiring. Extensive hands-on assignments are combined with the application of the current National Electrical Code governing residential wiring.
ELTC 104A  
Basic Industrial Robotics  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: None  
Introduction to industrial robotics programming, uses, maintenance and troubleshooting, and their integration into an automation environment. The students will learn about the mechanics of the robots, servo motor control, programming commands through the operator interface pendant, and safety aspects of the work-cells as well as electrical and mechanical systems. Programming tasks are the core focus of the class including basic motion commands, positional information and control, error conditions and recovery, special setup procedures, non-motion and advanced programming commands, testing and verification and back-up and recovery. The class is taught through hands-on projects and tasks to develop knowledge in material handling applications using full program definition and demonstration of their skills.

ELTC 106  
Fire Alarms Systems  
1 Cr. Hr. – 1 Contact Hr.  
Prereq: ELTC 101AL&L  
This course provides an overview of fire alarm systems. Topics include initiating devices, control panels, notification devices, monitoring and communications, general installation guidelines and codes and standards.

ELTC 150  
Industrial Electricity  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: ELTC 101AL&L  
This course is intended for electrical maintenance personnel with some previous electrical experience or coursework. It will review basic DC and AC electrical theory and components, safety, use of test instruments and electrical symbols. Other topics include: ladder diagrams, control circuits, starters, contractors, relays and overload devices. “Troubleshooting” will be emphasized and there will be an introduction to the use of programmable controllers for machine control.

ELTC 152  
National Electrical Code  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: None  
This course covers the National Electrical Code as currently adopted by the State of Michigan. Designed for the apprentice electrician, this course is also approved by the State of Michigan for the required upgrade for Journeymen and Master Electricians.

ELTC 160L&L  
Programmable Controllers  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: ELTC 101AL&L  
This course introduces the concept of machine control through programmable controllers. Program design, controller operation, wiring techniques, programming techniques, and applications are examined; related lab exercises will be conducted with Allen-Bradley SLC 500 controllers and RSLogix 500 Software.

ELTC 203  
Advanced Programmable Controllers  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: ELTC 160L&L  
This course is a continuation of ELTC 160L&L. Applications and programming of advanced instructions from the Allen-Bradley SLC 500/ MicroLogix 1000 instruction set are covered. Topics include data handling, logic functions, bit shift/sequencer functions, math operations, analog I/O, subroutine files and interrupts.

ELTC 204A  
Advanced Industrial Robotics  
4 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ELTC 104A with a minimum grade of “C,” must be taken “previous”  
Advanced industrial robotics programming, work-cell design, maintenance and troubleshooting, and their integration into an automation environment. The students will learn about vision systems, lighting, communications with other robots, communications with PLCs. Vision and communication tasks are the core focus of the class including part recognition, part inspection, offsets, robot-to-robot integration, and robot-to-external controller integration. The class is taught through hands-on projects and tasks to develop knowledge in material handling applications using full program definition and demonstration of their skills.
ELTC 210  
**Industrial Communications**  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: ELTC 160 with a minimum grade of “C”, class must be taken “previous”  
Industrial communications protocols, hardware requirements, and wiring will be explored and connected in lab. The students will learn about various communication choices between peripheral devices and hosts, automation devices, and supervisory systems. Communication concepts, standards, networks, and security are covered. The course is taught through hands-on projects and tasks to develop knowledge in communication applications between various industrial devices and demonstration of their skills.

ELTC 220  
**Electrical Troubleshooting**  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereq: ELTC 150 or ELTC 160L&L with a minimum grade of “C”, class must be taken “previous”  
Troubleshooting theory and process will be used to find, fix, and document a variety of electrical and system problems. The students will learn about test equipment, processes, and characteristics of various electronic and industrial devices. The class is taught through hands-on projects and tasks to develop knowledge and skills.

### Electronics

**ELTR 101A**  
**Electronics Basic**  
4 Cr. Hrs. – 7 Contact Hrs.  
Prereq: ELTR 101AL&L  
Topics include: Electromagnetism, conductors, insulators, volt-ohm-amp-meters, oscilloscopes, capacitance, inductance, resonance, impedance matching, and transformers. Laboratory experiments reinforcing the above topics are provided. This course covers: familiarity with common hand tools, safety practices, soldering, use and care of common laboratory equipment.

**ELTR 102B**  
**Electronics I: Active Devices**  
4 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ELTR 101A  
This is a course in solid state devices and circuits. It includes performance measurements, device testing, multi-stage amplifiers, coupling techniques, amplifier design, and feedback principles. Some devices covered are BJT’s, JFET’s, MOSFET’s, and diodes. Laboratory experiments will be required.

**ELTR 112A**  
**Digital Electronics I**  
4 Cr. Hrs. – 6 Contact Hrs.  
Prereq: None  
Digital Electronics I is the first course in a three-semester sequence of digital courses. Content includes number systems, codes, logic gates, Boolean algebra and combinational logic circuits. Relevant laboratory experiments will be required of students each week.

**ELTR 202B**  
**Industrial Electronic Systems**  
4 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ELTR 160L&L  
The advanced study of electronic circuits and their application to the control of industrial and commercial equipment and processes. The design, construction and analysis of operational circuits includes power supplies, SCRs, UJT’s, diacs, triacs, phototransistors, relays, programmable controllers, timing circuits and motors with their associated control circuits. Proper procedures are stressed in laboratory assignments which are designed to provide practical experiences for the student.
ELTR 212A
Biomedical Instrumentation II
4 Cr. Hrs. – 6 Contact Hrs.
Prereqs: ELTR 214
This course introduces the student to operating and servicing basic medical instrumentation such as EEG, ECG, defibrillators, safety analyzers, etc. Basic physiological signals and terminology are covered. Typical medical equipment circuits are constructed and tested. Electrical safety is emphasized.

ELTR 214
Biomedical Instrumentation I
3 Cr. Hrs. – 3 Contact Hrs.
Prereqs: ELTC150
Students will acquire a knowledge of the language common to electronics and the medical profession based on spelling, pronunciation and definition of words and terms related to anatomy, medical equipment, electronic test equipment and safety. They will become acquainted with the fundamentals of medical equipment and testing concepts. Students will be introduced to the field of Biomedical Engineering Technology as a career.

Engineering

ENGR 105
Introduction to Engineering
4 Cr. Hrs. – 4 Contact Hrs.
Prereq: MATH 100A
An introduction to the engineering profession and to its various disciplines; to the professional skills required of engineers; including oral and written communications, ethics of the profession, and team building and teamwork; and to the design process. Video presentations of professional activities and studies will be shown.

ENGR 202
Statics
3 Cr. Hrs. – 3 Contact Hrs.
Prereqs: PHYS 203L&L and MATH 162A with a minimum grade of “C” in each
NOTE: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.
A study of force systems in two and three dimensions. Composition and resolution of forces and force systems, principles of equilibrium applied to various bodies, simple structures, friction, centroids, moments of inertia. Vector algebra is used where appropriate.
IT IS IMPORTANT FOR STUDENTS TO TAKE ENGLISH CLASSES EARLY!
Knowledge of the English language and skill in using it are required in many aspects of life, including one’s employment and, consequently, many MCC courses, programs, and degrees require competency in English composition. If you are contemplating earning an ASA degree or are planning to earn a bachelor’s degree at a four-year school, you are strongly advised to follow the guidelines below. If you are planning to enter another program or are unsure of your plans, see a counselor for specific requirements that may apply to you.

GUIDELINES
Take English 101 within your first 15 hours of coursework and English 102 within your first 30 hours of coursework. MCC offers two options for beginning your college writing requirements. Depending on your confidence in your ability to read and write at the college level, you are invited to enroll in ENG 101 (English Composition I) either with or without the support of RDG 090 (Integrated Reading and Writing). For details about the two courses and for guidance about choosing the option that makes the most sense for you, go to www.muskegoncc.edu/course-placement/

• All English courses use computers for writing, so knowledge of some word processing program is helpful.
• All students are encouraged to schedule an appointment and meet with an MCC Counselor to create an academic plan.
• The Writing Center is a free resource designed to support you throughout the writing process for any college writing assignment. For more information, go to https://www.muskegoncc.edu/college-success-center/writing-center/

ENG 101
English Composition
3 Cr. Hrs. – 4 Contact Hrs. 
Follow placement guidelines. A course in which students will develop the abilities to read critically, to think logically, to discuss intelligently, and primarily to write effectively using exposition, argumentation, and research. A grade of C or better is required to enter into English 102.

ENG 102
English Composition
3 Cr. Hrs. – 3 Contact Hrs. 
Prereq: ENG 101 with a minimum grade of “C”
A course in which the student will develop the ability to interpret and critique a variety of literary forms, especially fiction, drama and poetry. Students will discuss these works and write critical analyses.

ENG 200A
Heroes of Early Western Literature
3 Cr. Hrs. – 3 Contact Hrs. 
Prereq: ENG 102
An intensive study of selected major literary works of Western Civilization from 2600 B.C. through the Renaissance.

ENG 201A
Heroes of Later Western Literature
3 Cr. Hrs. – 3 Contact Hrs. 
Prereq: ENG 102
A continuation of English 200A. Study of world literary classics from the Renaissance until modern times.
ENG 205
Introduction to Poetry
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: ENG 102
An introduction to the study of poetry with the purpose of developing critical values and the ability to read with understanding and appreciation. Students will each select a poem by a leading English or American poet as the basis of a major critical study.

ENG 206
Introduction to Drama
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: ENG 102
A study of representative dramas and theaters from Greek to modern times.

ENG 207
Diverse Voices
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: ENG 102
Note: With instructor permission, ENG 102 may be taken as a corequisite.
This course studies literary works by multicultural writers who, historically, have been marginalized in the United States: African American, Native American, Asian American, and Latinx (Hispanic), as well as those of the Middle Eastern diaspora. The course focuses on race, ethnicity, minority status, and the immigrant experience and considers concepts such as assimilation, cultural persistence, outsider status, and hybrid identity. Students will learn how these writers reconceptualize essential human ideals of love, loyalty, home, family, and belonging through an examination of fiction, poetry, plays, film, and music.

ENG 210
The Nature of Language
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: ENG 102
Introduction to the English language through a study of its history and characteristics as described by structural and transformational grammarians and cultural maveners.

ENG 211
World Mythology
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: ENG 102
Overview of representative Greco-Roman, Middle Eastern, Norse, English, Pacific Island, Indian, Chinese, Japanese, African, South American, Native American mythology and epics. Surveyed for understanding of creation, Fertility and Hero myths and their meaning in our cultural and personal attitudes and ideas.

ENG 213
Literature of Shakespeare
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: ENG 102
Overview of Western Civilization’s most respected and famous author, William Shakespeare. The course explores several plays and poems in depth as well as the culture and traditions of Shakespeare’s England. In addition, students will discover Shakespeare’s influence on our contemporary world. Field trips are anticipated (optional).

ENG 216
Introduction to Film
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: English 102 with a C or better, or concurrent with English 102 with Instructor Permission
An introduction to the art of the film as storytelling/narrative; the course might include foreign and domestic films, documentary film, and a few (2-3) experimental and/or underground films. In addition to thematic study of films, the course explores the various elements of story-telling/narrative through movies: characterization, purposes of setting, theme, symbolism, music, lighting, etc.

ENG 218A
Horror, Fantasy and Science Fiction
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: ENG 102
This course focuses on three genres of literature possessing rich histories in the development of folklore, literary forms, and literary criticism, as well as abundant connections with the development of popular culture in the twentieth and twenty first centuries. The class will read five novels spanning these genres, as well as selected short works of fiction and commentary by authors and critics active in these fields. In addition, films with connections to the literature will be viewed to better understand
the themes expressed in the literature and their popular reception in a visual medium.

**ENG 220**  
**Graphic Novels**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: Students must have completed and passed English 101 with a C or better.

Graphic Novels explores the graphic novel, a more extended literary form of the comic book. Looking at comics from the Silver Age to graphic works of today, this course explores the art, the text, the authors and the historical context of each work looking for connections to our pasts, presents and futures. Students in this course will also have the opportunity for a field trip to an annual Comic Con.

**ENG 221**  
**Advanced Writing**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ENG 102  

A writing “workshop” course designed to introduce students to the practice of expository prose. Students will read and write in a variety of essay forms – from personal narratives to critical reviews – as well as critique each other’s work.

**ENG 222**  
**Creative Writing**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ENG 102  

Written recommendation of the freshman composition instructor may be required. The study of writing techniques as well as actual writing and critical discussion of various types of short fiction are stressed. Students are encouraged to take a literature course prior to enrolling in this writing-intensive course.

**ENG 223**  
**Poetry Writing Seminar**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ENG 102  

An informal forum in which students experiment writing their own poetry. It includes the study of open forms and patterned forms. Students discuss each other’s work as well as the works of modern and contemporary poets.

**ENG 225**  
**Major American Writers/ American Literature I**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ENG 102  

This course is a study of representative literature of the United States from the earliest settlement to 1865. Serving both the historical and critical perspectives, the focus is upon certain recurring themes which have grown out of the American experience and their continuing relevance for today’s student.

**ENG 226**  
**Major American Writers/ American Literature II**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ENG 102  

Note: With instructor permission, ENG 102 may be taken as a corequisite. Continuation of English 225, from the Civil War to the present.

**ENG 227**  
**British Literature I (673-1744)**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ENG 102  

In British Literature I (673-1744), students will survey the realm of British literature and discuss its forms, functions, meanings and themes. Students will write formal and informal interpretations of the writings and complete essays and take two exams.

**ENG 228**  
**British Literature II (1750-today)**  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ENG 102  

Note: With instructor permission, ENG 102 may be taken as a corequisite. Prior completion of ENG 227 is recommended. From Frankenstein to Dracula, Peter Pan to Harry Potter, British Literature has impacted society and culture in amazing and important ways. British Literature II explores the time periods, the works and the authors from the United Kingdom (England, Scotland and Wales) as well as some from Ireland and India (spanning from 1750 to today) to give students a wide introduction into the literature that has greatly influenced and informed the current world we live.
ENG 231  
Themes in Women’s Literature  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ENG 102  
This course examines women in contemporary American culture viewed from literary, historical, psychological, political, sociological and multicultural perspectives. The course explores the variety of writing styles women have used to think about issues such as the search for identity, power, societal roles, relationships and conflict, marriage, sexuality, treatment as the other, responses to patriarchy, achievement, and daily life. Students will be exposed to contemporary feminist criticism and encouraged to think critically about the impact of gender on literature, expression, and experience.

ENG 234D  
Library Skills/Research Skills  
1 Cr. Hr. – 1 Contact Hr.  
Prereq: ENG 101  
This course is designed to acquaint the student with resources available in the library: print, electronic resources, online databases, and the Internet. It will give the student basic knowledge for developing search strategies, conducting research, evaluating source material, and compiling an extensive bibliography.

ENG 250  
Poetry Workshop  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: None  
Generally a summer offering with specialists in poetry. Workshop includes writing and criticism. May be elected for a maximum of six credits over a period of two summers - three credits per summer.

Environmental Science

ENV 110L&L  
Environmental Science  
4 Cr. Hrs. – 6 Contact Hrs.  
Prereq: None  
This is an introductory lecture and laboratory course for all students. This course includes study of relevant environmental issues occurring at regional to global scales. Natural and human systems throughout West Michigan will be studied to provide local context for broader environmental concepts. Through inquiry-based approaches, students will apply the scientific method by formulating hypotheses, collecting and analyzing data, and communicating results. On-campus and off-campus field trips will be required as part of this course.
**Food Science**

**FS 101L&L**  
Introduction to Food Science and Process  
3 Cr. Hrs. – 4 Contact Hrs.  
Prereqs: none

The Intro to Food Science and Processing course is an introductory course that teaches the terminology and concepts necessary to communicate in the Food Manufacturing Industry. The course introduces the basic chemistry of food, testing of food and soil, the types of microbiological organisms present, and food preservation. Calculations for product formulation from lab scale to batch processes will be performed. Also included are topics and case studies in packaging, contamination, food biotechnology, and careers in the agricultural industry. A lab component is included whereby the concepts in the course are demonstrated and critical thinking skills will have to be applied in order to solve problems. Experiments will include fermentation, analytical testing of food and soil, production of biodiesel, canning, and use of analytical tools for measurement. The Produce Safety Alliance Grower Certification that meets the Food Safety Modernization Act (FSMA) Produce Safety Rule is included.

---

**Foreign Languages**

*(See French, German and Spanish)*

---

**French**

- **FR 101**  
  Basic French  
  4 Cr. Hrs. – 4 Contact Hrs.  
  Note: Recommended English 101 with a minimum grade C prior to taking this course.  
  This is a beginning course for students who have had no previous study of French. The emphasis is on developing communication in French through listening, speaking, reading and writing activities.

- **FR 102**  
  Basic French  
  4 Cr. Hrs. – 4 Contact Hrs.  
  Prereq: FR 101 with a minimum grade of “C” or successful completion of two recent years of high school French and instructor permission  
  A continuation of FR 101. The student continues to develop the capacity to understand, speak, read and write French.

- **FR 201**  
  Intermediate French  
  4 Cr. Hrs. – 4 Contact Hrs.  
  Prereq: FR 102 with a minimum grade of “C” or successful completion of three recent years of high school French and instructor permission  
  This second year course is designed to improve the four basic skills begun in the first year. This course reviews and reinforces material learned in the first year, examines more tenses and other aspects of grammar, and provides practice in expanding capabilities in reading, writing, speaking and understanding French.

- **FR 202**  
  Intermediate French  
  4 Cr. Hrs. – 4 Contact Hrs.  
  Prereq: FR 201 with a minimum grade of “C” or successful completion of four recent years of high school French and instructor permission  
  This course is a continuation of FR 201.
**Geography**

**GEOG 101A**
Physical Geography  
4 Cr. Hrs. – 5 Contact Hrs.  
This integrated lecture and lab is a course study in Earth Systems Science; the atmosphere, hydrosphere, and surface features of the lithosphere. The coursework focuses on the development of geographic models and their use as a tool to explain phenomena in man’s physical environment.

**GEOG 104**
Cultural Geography  
3 Cr. Hrs. – 3 Contact Hrs.  
A study of the world’s people and how they occupy the earth. Important topics include: population density and distribution, languages, religions, political systems and international relations, economic systems, and urbanization. Emphasis will be placed on spatial thinking and global interconnectedness.

**GEOG 105**
World Regional Geography  
3 Cr. Hrs. – 3 Contact Hrs.  
An introductory examination of the major cultural realms of the world—areas which share similar cultural and economic conditions. The physical environment and human impact on that environment will also be studied for each region. Units of study may include: Anglo-America, Europe, Russia and her neighbors, sub-Saharan Africa, North Africa/Southwest Asia, Monsoon Asia, East Asia, and middle and South America. Emphasis will be placed on spatial thinking and global interconnectedness. A previous course in physical or human geography would be helpful, but is not mandatory.

**GEOG 214**
Science of Climate Change  
3 Cr. Hrs. – 3 Contact Hrs.  
The science behind climate change and its potential impacts will be the focus of this course. A study of the major climate systems, their controls, distributions and significance will form the course foundation. Paleoclimatology, global gas distributions, and climate impact assessment will support analysis from an interdisciplinary approach to this science study. such as solar radiation,

**GEOG 215**
Introduction to Weather and Climate  
4 Cr. Hrs. – 5 Contact Hrs.  
This course is an introductory study of the atmosphere which includes both weather and climate. Fundamental physical laws governing weather elements will be examined, such as solar radiation, temperature, moisture, pressure, winds, and weather systems. Current weather data is delivered via the internet, which is coordinated with learning activities. Students will be introduced to the excitement of weather in near real-time. Broad aspects of climates and local microclimatology will also be integrated. An optional field trip to the National Weather Service Office, Grand Rapids may be offered. No prerequisites, although physical geography, and the knowledge of basic computer skills including the ability to manipulate images, are recommended.

**GEOG 251**
Introduction to GIS  
3 Cr. Hrs. – 3 Contact Hrs.  
This course provides a foundation in geographic information systems (GIS) such as data types, cartography, queries, classification, basic editing, basic raster analysis, uses of GPS devices and related data map overlay techniques. The theory and operation of GPS receivers and data integration with GIS is covered in multi-week student-initiated projects. This course requires advanced computer skills (knowledge of hardware/software, file transfer, import/export of various data types, Boolean Internet search techniques, etc.).

**GEOG 260**
Geoscience Field Experience  
3 Cr. Hrs. – 3 Contact Hrs.  
Geoscience is an all-encompassing course of study focused on the planet earth. The purpose of this course will be to provide students with integrated field experience in the Geosciences. A significant portion of the course work is completed in the field at a local or distant location depending upon the title and focus of the course for a given semester. Students will explore the physical and cultural geography of the focus area. Students will make field observations, create sketches, record data, and construct a field notebook detailing all aspects of their field experience. Participation is required.
in all field activities. The course will include pre-
trip class sessions and post-trip class sessions. 
There will be off campus travel for this course. 
Approximate costs are dependent on the field 
location and duration of the fieldwork.

Geology

**GEOL 100**
Natural Disasters
3 Credit Hrs. – 3 Contact Hrs. Fall
Natural disasters are major events on Earth that 
often have extreme consequences. This course is 
a survey of geoscience through an examination of 
natural hazards, including the causes and effects 
of earthquakes, volcanic eruptions, tsunamis, 
floods, climate change, and more. Case studies 
of natural disasters will be discussed, focusing on 
the geologic context of the hazard and its Impact 
on society, individuals, and the environments. 
The course will examine how society minimizes 
the risks associated with disasters and students 
will develop a foundation for critically evaluating 
future approaches to managing hazards. This 
course is designed for students without an 
extensive background in science or math and who 
do not plan to major in geology. Potential geology 
majors should take GEOL-101A.

**GEOL 101A**
Introduction to Physical Geology
4 Credit Hrs. – 5 Contact Hrs. Winter
This integrated lecture and lab is a scientific 
study of the materials, structures and systems 
of the planet Earth. Students will investigate the 
processes affecting the interior and exterior of 
the Earth, and the rocks, minerals, and structures 
produced by these processes. The course may 
include a one-day weekend field trip, weather 
permitting.

**GEOL 102**
Introduction to Earth History
4 Credit Hrs. – 5 Contact Hrs. Summer
This integrated lecture and lab is an introduction 
to the geologic history of the planet Earth and 
its life forms. Based on the unifying theories 
of plate tectonics and organic evolution, the 
course presents the evidence used by geologists 
to reconstruct Earth’s ancient environments and 
organisms, and establishes connections between

**GEOL 201**
Oceanography
4 Cr. Hrs. – 4 Contact Hrs. Spring
Oceanography is the study of the oceans through 
the lens of many different scientific disciplines. 
This course emphasizes geological, chemical, 
physical, and biological aspects of oceanography 
and how these systems interact and influence one 
another. Topics range from air-sea gas exchange 
and its influence on global climate, to the 
differences between waves and tsunamis and what 
causes them to occur, to life in the ocean and how 
it is influenced by geologic, chemical, and physical 
processes in the ocean. As part of the course field 
trip participation may be required.

**GEOL 250LAB**
Coral Reef Ecology Lab
1 Cr. Hrs. – 1 Contact Hrs. Summer
Prereq: BIOL 250LEC, GEOL 250LEC, or 
Instructor Permission
This field study course will provide students 
a hands-on opportunity to study coral reef 
ecosystems in and around the Caribbean Island 
of Nevis. The biology, chemistry, geology, 
geography, and Caribbean history and culture 
will be studied in the classroom and in country. 
Through data collection and analysis, students 
will examine the effects of global climate change 
and ocean acidification on reef ecosystems. 
Individuals may participate through scuba, 
snorkel or on-board data collection and analysis. 
Ability to swim and SCUBA certification are a 
plus but not mandatory for participation. Travel 
will take place in the summer semester. Travel 
dates may vary year to year. Students must be 18 
years of age prior to travel.
GEOL 250LEC
Coral Reef Ecology Lecture
2 Cr. Hrs. – 2 Contact Hrs. W
Prereq: Instructor Permission
Note: Students must be at least 18 years of age prior to the trip. Approximate cost for the course and dates for the trip can be viewed within Student Planning. Travel will take place in early June.
This field study course will provide students a hands-on opportunity to study coral reef ecosystems in and around the Caribbean Island of Nevis. The biology, chemistry, geology, geography, and Caribbean history and culture will be studied in the classroom and in country. Through data collection and analysis, students will examine the effects of global climate change and ocean acidification on reef ecosystems. Individuals may participate through scuba, snorkel or on-board data collection and analysis. Ability to swim and SCUBA certification are a plus but not mandatory for participation. Travel will take place in the summer semester and will require students to sign up for a 1-credit laboratory course.

German

GER 101
Basic German
4 Cr. Hrs. – 4 Contact Hrs. W
Note: Recommended English 101 with a minimum grade C prior to taking this course.
This course is the first semester of a communicative language course to promote proficiency and practical competence in elementary German. It will focus on the essential elements of effective communication by teaching skills in listening, speaking, reading and writing. It will also provide cultural insights into life in German-speaking countries.

GER 102
Basic German
4 Cr. Hrs. – 4 Contact Hrs. W
Prereq: GER 101 with a minimum grade of “C” or successful completion of two recent years of high school German and instructor permission
This course is a continuation of GER 101 with continued emphasis on communication and proficiency.

GER 201
Intermediate German
4 Cr. Hrs. – 4 Contact Hrs. D
Prereq: GER 102 with a minimum grade of “C” or successful completion of three recent years of high school German and instructor permission
This is the first semester of an intermediate level German course, which stresses skills to help the student communicate competently and appropriately in various situations in German. It reflects the American Council on the Teaching of Foreign Languages (ACTFL) proficiency guidelines. Listening, speaking, reading and writing skills will be strengthened by using authentic, contemporary information.

GER 202
Intermediate German
4 Cr. Hrs. – 4 Contact Hrs. D
Prereq: GER 201 with a minimum grade of “C” or successful completion of four recent years of high school German and instructor permission
This is a continuation of GER 201 with expansion of communicative and proficiency abilities, contemporary cultural information, and grammatical knowledge.
GRD 101
Introduction to InDesign
3 Cr. Hr. – 3 Contact Hrs. ▼
Prereq: None
This course explores the components, terminology, features, and uses of InDesign. Emphasis is given to creating professional-looking layouts utilizing InDesign as the layout vehicle. Through hands-on lectures, demonstrations, and projects, the student will learn the essential techniques and functions of the program while understanding some of the more complex issues of this software.

GRD 102
Introduction to Illustrator
3 Cr. Hr. – 3 Contact Hrs. ▼
Prereq: None
This course explores the components, terminology, features, and uses of Illustrator. Emphasis is given to creating professional-looking artwork and graphics utilizing Illustrator as the layout vehicle. Through hands-on lectures, demonstrations, and projects, the student will learn the essential techniques and functions of the program while understanding some of the more complex layout issues that designers face when using the software.

GRD 103
Introduction to Photoshop
3 Cr. Hr. – 3 Contact Hrs. ▼
Prereq: None
This course introduces the components, terminology, features, and uses of Photoshop. Emphasis is given to creating professional-looking artwork and graphics utilizing Photoshop as the layout vehicle. Through hands-on overviews, tutorials, and competencies, the student will learn advances techniques of the program while understanding some of the more complex issues that designers face when using this software.

GRD 110
Principles of Design
3 Cr. Hr. – 6 Contact Hrs. ▼
Prereq: None
This course provides an introduction to the visual and verbal vocabularies, and the principles and elements of design as they relate to graphic design. The student will focus on making connections between idea and visualization using type, imagery, and color to solve communication problems. The Initial stages of the design process and various forms of conceptualizing will be emphasized throughout the course.

GRD 120
Introduction to Graphic Design
3 Cr. Hrs. – 6 Contact Hrs. ▼
Prereq: GRD 110 recommended, and one of the following: GRD 101, GRD 102, or GRD 103 also recommended
Practice of basic design vocabulary, elements, and principles. Individual elements of design such as line, shape, value, texture, space, size, and color will be explored as they relate to electronically generated digital formats and print designs. Emphasis will be given to the principles of design (i.e., balance, emphasis, rhythm, and unity) to analyze the effectiveness of printed communications and other related electronic media. Students will create basic designs in contemporary design software including Illustrator, Photoshop and InDesign.

GRD 140
Introduction to Typography
3 Cr. Hrs. – 6 Contact Hrs. ▼
Prereq: GRD 110 recommended, and one of the following: GRD 101, GRD 102, or GRD 103 also recommended
Introduction and study of the history, vocabulary, and principles of typography. Basic type identification, styles, and measurements will be discussed and practiced. The primary purpose of type as a means of communication combining readability and legibility will be reinforced. Design elements and principles will be presented in relation to designing with type.

GRD 160
History of Graphic Design
3 Cr. Hrs. – 3 Contact Hrs. ▼
Prereq: None
This course will explore the evolution of graphic design from the invention of the alphabet to the age of mass media, from the invention of the printing press to the present. Students will be required to give oral presentations, participate in team exercises and write brief surveys of various elements within course readings. Outside research will be required as well as text readings.
GRD 210  
Graphic Design II  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: GRD 110, GRD 120, GRD 140, and two of the following: GRD 101, GRD 102, GRD 103  

Students will learn about concept development, communication planning, and the execution of 2 and 3 dimensional designs through the development of an identity system as defined throughout the course. Criteria will be established and the solutions must be thoughtful, logical and conclusions appropriate. Solve and manage a complex communication problem. Develop cohesive program components to the identity system. Manage time accordingly to have all components complete by the established deadline.

GRD 280  
Portfolio Preparation  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: Capstone/Instructor approval - students should be at or near the final semester of the graphic design curriculum.  

This course will focus on preparing the graduating student for college transfer or interviews and portfolio reviews with prospective employers. Students will analyze, critique, and update existing designs for inclusion in their professional portfolio. Students will also create a personal brand, identity system, and design their own resume. Upon course completion, students will have a professional portfolio in both digital and printed formats. Although there are no prerequisites, students should be at or near the final semester of the graphic design curriculum.

GRD 290C12  
Graphic Design Internship  
2 Cr. Hrs. – 2 Contact Hrs.  

This is a 2 credit capstone class. The purpose of this class is to give the student on-the-job experiences either in their area of interest or an area where they feel they would like further exposure that may not be available at the college.

GRD 290C13  
Graphic Design Internship  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: Students should be at or near the final semester of the graphic design curriculum.  

The Graphic Design Internship is a paid or non-paid fieldwork experience in the student’s area of study, or area where they feel they would like further exposure that may not be available at the college. The course is offered on a pass/no pass basis.

GRD 292  
Graphic Design Studio M  
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: Capstone course for students with minimum cumulative GPA - 3.0 and instructor permission.  

This is a capstone course for advanced design students. The practicum course is designed to emulate a working design studio. The instructor acts as the Creative Director managing students on a variety of projects selected from local businesses and organizations. Projects will vary depending on client needs. Students gain valuable experience and understanding of the field in a studio environment by combining conceptual ideas and technical skills, within a team environment. Learning opportunities will also include field trips to professional design firms. Professionalism is stressed through regular presentations to clients. Upon completion of the course students are required to present their work to the MCC Graphic Design Advisory Committee in a formal portfolio review and exhibition format.

GR 240  
Studio Lighting For Photography  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: ART 214  

Students will study different qualities of light and their uses and effects for the photographic image. Students will apply effective lighting techniques utilizing studio lighting, continuous and strobe as well as natural lighting. A successful photograph will result from the understanding and ability to control these elements.
Health Education

(See also Allied Health)

HE 100A
Community First Aid and Safety
2 Cr. Hrs. – 2 Contact Hrs. FWSO
Prereq: None
Course is designed to prepare the general public with first aid knowledge and skills necessary to care for most injuries and emergencies, including First Aid, Adult, Child, and Infant CPR and AED. Accident prevention information is included. American Red Cross certification can be awarded upon satisfactory completion of 80% or better.

HE 102
Nutrition for Fitness and Sport
3 Cr. Hrs. – 3 Contact Hrs. FWSO
Prereq: None
A course designed to provide holistic health, and information to the individual who is physically active, or to those who desire to initiate a personalized fitness program. Required for individuals interested in Physical Education and Health Education majors.

HE 106
Concepts of Health and Well-being
3 Cr. Hrs. – 3 Contact Hrs. FWSO
Prereq: None
This class is designed to advance the student’s knowledge and to enhance their own health. An examination of national health priorities regarding the reduction of preventable death, disease and disability will be studied. Health related issues included are: substance abuse, stress reduction, grief and loss, development of healthy relationships, sexually transmitted diseases, life-style related diseases and principles of a healthy life-style.

HE 110
Industrial Safety and Workplace Training
1 Cr. Hr. – 2 Contact Hrs. FW
Prereq: None
Industrial Safety and Workplace Training is a first aid, prevention, and cardiopulmonary resuscitation (CPR/AED) program to prepare individuals to respond to injuries and sudden illnesses until advanced medical personnel arrive and take over. Included are a review of basic safety laws (MIOSHA, OSHA, HAZMAT, Safety Data Sheets) and personal safety measures, which an employee can practice at home in preparation for work.

HE 120
Introduction to Public Health
3 Cr. Hrs. – 3 Contact Hrs. F
Students will learn the foundations and functions of public health, its history, and its current applications within national and global systems. Students will learn the ways biological, psychosocial, cultural, economic, environmental, philosophical, ethical and financial realities impact both personal and population health as well as systems, interventions, and strategies to improve those outcomes. Cultural competence in public health and healthcare delivery will be emphasized. This course is part of the Public Health Transfer Pathway.

HE 130
Community Health
3 Cr. Hrs. – 3 Contact Hrs. W
Recommended: HE 120 Introduction to Public Health (Previous, not concurrent)
Students will expand their understanding of public health to include the specifics of community health needs, assessments, and interventions. The interconnectedness of public health systems with governmental and non-governmental organizations will be explained while providing students an opportunity to develop potential health promotion strategies to improve outcomes for given populations and public health concerns. Basic epidemiological and biostatistical concepts will also be covered.

HE 202A
Sports Injuries and Prevention
3 Cr. Hrs. – 4 Contact Hrs. W
Prereq: None
A study of the basic fundamentals of sports injury care. The course includes the organization of, and procedures for, the prevention and taping of sports injuries. BIOL 105L&L is not required as a prerequisite but is strongly encouraged.
History

HIST 101
Western Civilization - to 1500
4 Cr. Hrs. – 4 Contact Hrs. FWSO
This course will examine the development of Western Civilization from pre-history to the High Middle Ages/Renaissance, investigating the legacies of the Neolithic Period, ancient Mesopotamia and Egypt, Greece, Rome, Islam and Medieval Europe. Topics will include political structures, artistic expressions, religious beliefs, and intellectual developments. Social history will be emphasized and the course may culminate with student participation in a Medieval Festival.

HIST 102
Western Civilization - 1500 to Present
4 Cr. Hrs. – 4 Contact Hrs. FWSO
This course will investigate the development of modern Western Civilization covering the period from the Renaissance (about 1500) to the present, emphasizing the developments which have shaped the civilization of the 20th/21st century in the West: government, economics, society, religion, philosophy, ethics, science, and the arts.

HIST 150
World History to 1500 CE
3 Cr. Hrs. – 3 Contact Hrs. FWO
This course deals with basic content and methods of history through an introductory study of world cultures before 1500 CE. The course focuses on specific societies in Africa, Asia, Europe, and the Western Hemisphere, analyzing and comparing the ways in which political, economic, social, cultural, and demographic factors influenced the development of these various cultures.

HIST 151
World History from 1500 CE
3 Cr. Hrs. – 3 Contact Hrs. FWO
This course deals with basic content and methods of history through an introductory study of world cultures from 1500 CE to the present. The course focuses on specific societies in Africa, Asia, Europe, and the Western Hemisphere, analyzing and comparing the ways in which political, economic, social, cultural, and demographic factors influenced the development of these various cultures.

HIST 201
United States to 1877
3 Cr. Hrs. – 3 Contact Hrs. FWSO
A course covering the history of the United States from its Native American and European origins to the end of Reconstruction. Major topics include the development of British colonial policy, the causes of the War for Independence, the formation of the Constitution and Bill of Rights, the development of democracy during the Jefferson and Jackson Administrations, immigration, industrial and urban history, Manifest Destiny and territorial expansion, the institution of slavery, the antebellum reform movement, the causes and consequence of the Civil War and Reconstruction.

HIST 202
United States from Reconstruction to Present
3 Cr. Hrs. – 3 Contact Hrs. FWSO
A study of the social, economic, political, and intellectual development of the American nation and people, from Reconstruction to the present. The major topics include: territorial expansion and American foreign policy; the growth and importance of industry and business; the urban community and its problems; trade-commerce fields; the urban community and its problems; industry and business; the struggle and achievement of labor; the study of immigration and race relations; the quest for women’s equality; American educational and cultural advances; the increased use of government to improve society; the Cold War, détente and current to developments in U.S. – World relations; and the transformation of American Political ideology.
HIST 207
African American History
3 Cr. Hrs. – 3 Contact Hrs.
A study of the dynamic role of Black people in the United States from their African origins to present day America. The course emphasizes significant Black contributions in American history, and selected achievements of African American women will be studied. Contemporary issues related to the African American experience in the U.S. will be researched. A visit to an African American historical site or event may be included in the course.

HIST 211
Michigan History
3 Cr. Hrs. – 3 Contact Hrs.
A study of the social, economic, and political development of Michigan. Emphasis is on Michigan’s history since the time of French exploration. Major topics dealt with in the course include: American Indians; French exploration and settlement; Michigan under the British flag; “territoryhood” to statehood; Michigan’s role in the Civil War; lumbering and mining activity in the latter half of the 19th century, the development of Michigan’s automotive industry and the concurrent rise of industrial unionism in Michigan. Some emphasis will also be placed on Great Lakes history and the local history of the Muskegon area.

HIST 212B
Gettysburg Battlefields
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: None
This course concentrates on an intensive study of the pivotal battle for America’s future: Gettysburg. Major topics include the varying causes of the Civil War, Northern and Southern armies and military strategy, and the short and long ramifications of the three day battle for Gettysburg.

HIST 214
Siege of Vicksburg
1 Cr. Hr. – 2 Contact Hrs.
This course concentrates on an intensive study of a ten-month campaign resulting in a siege of the city of Vicksburg. Primary topics include examination of the geography and topography of the Mississippi Valley during the 1860’s as it relates to the American Civil War.

HIST 216
Introduction to World War II
3 Cr. Hrs. – 3 Contact Hrs.
This class will study the causes, the course, and the implications of World War II, this greatest of twentieth century conflicts. It will handle most of the geographic areas involved, the major diplomatic, political and military events, and some of the key figures of the war. It covers the time period of 1918 to the present, with an emphasis of course on the years 1939-1945.

HIST 220
Labor Studies
3 Cr. Hrs. – 3 Contact Hrs.
A survey course studying and critically analyzing the historical, political, and legal frameworks of the labor movement, major labor laws, causes and purposes of the labor movement, union structure and behavior, and labor-management approaches to solving employment disputes in the U.S. and internationally.
Humanities

HUM 195
Introduction to Humanities
3 Cr. Hrs. – 3 Contact Hrs.
This course will provide the student with an awareness of the cultural strengths and weaknesses of our changing cybernetic society. The student will study how the performing and creative arts, philosophy, psychology, religion and applied technology impact the individual as well as society. In both an historical and individual context, the student will learn that the understanding of what it means to be human is an art which can help facilitate the development of one’s full potential.

Hydraulics/Pneumatics

HP 101
Hydraulics/Pneumatics
3 Cr. Hrs. – 4 Contact Hrs.
Prereq: None
An overview of industrial fluid power technology with emphasis on hydraulic and pneumatic components and circuits. Practical hands-on exercises are provided using pneumatic training equipment. Component recognition and circuit analysis are covered for their applications to maintenance, modifications, and design activities in the field.

HP 201
Advanced Hydraulics
4 Cr. Hrs. – 6 Contact Hrs.
Prereq: HP101 with a minimum grade of “C”, class must be taken “previous”
An overview of industrial fluid power technology with emphasis on advanced concepts. Practical hands-on exercises are provided using hydraulic training equipment. Component recognition and circuit analysis are covered for their applications to maintenance, modifications, and design activities in the field.

International Cultural Studies

ICS 101AGER
International Cultural Studies in Germany
(formerly ICS 101GER)
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: None
Note: Students must be selected to participate in the Exchange Program between Muskegon Community College and the Kaufmännische Schule Stuttgart-Nord and must accept the terms of participation. German language abilities are not required but are highly recommended.

This course introduces students to the Global Community as represented by Germany. The student will study German culture, history, and politics through lectures, discussions, and actual travel to Stuttgart, Germany. It is offered in conjunction with the Kaufmännische Schule Stuttgart-Nord in Stuttgart, Germany, and culminates with a ten-day visit to Germany. Beyond tuition and texts, additional costs include the airfare to Stuttgart, Germany, and spending money while in Germany. Also note: This course does not fulfill the Foreign Language option under the International category of the ASA degree.
Machining Technology

**MT 101B**
**Basic Machining**
4 Cr. Hrs. – 6 Contact Hrs.  FWH
Prereq: None
This introductory course presents theory and hands-on experience in the practical application of machining. The course is structured for the student who has little or no previous experience in the field. The course introduces the student to industrial safety, precision measuring, common manufacturing materials, fasteners, and the operation of basic machine tools. These machine tools include the pedestal grinder, drill press, lathe, vertical milling machine, horizontal milling machine, and the surface grinder. CNC machining and other advanced metalworking methods will also be discussed.

**MT 102A**
**Intermediate Machining**
3 Cr. Hrs. – 5 Contact Hrs.  F
Prereq: MT 101B
This course offers an in-depth examination of the machine tools commonly found in industry. The capabilities of drilling, turning, milling, and grinding machines will be explored as well as how these methods relate to advanced machining techniques and modern machine controls. A major focus of milling and turning will be experienced in the lab portion of this course. Each student will operate a CNC machine during the lab. The precision and quality that can be expected of these processes and their relationship to manufacturing will be stressed throughout the course.

**MT 103A**
**Advanced Machining**
3 Cr. Hrs. – 5 Contact Hrs.  F
Prereq: MT 102A
This course will explore advanced machine tool operation and advanced grinding techniques. A major focus of grinding will be experienced in the lab portion of the course. Machines to be used in this class are: EDM, Surface Grinder, and Numerical Control Machine. Advanced operation of the Lathe, Mill, and Grinder will be discussed.

**MT 150**
**Machinery Handbook**
3 Cr. Hrs. – 3 Contact Hrs.  FWH
Prereq: None
This course familiarizes the technical student with the Machinery Handbook and its uses in the solution of problems.

**MT 205A**
**NC/CNC (Numerical Control/Computer Numerical Control)**
3 Cr. Hrs. – 5 Contact Hrs.  FWH
Prereq: None
An introductory course in practical application of numerical control machining, and off-line programming. Designed to expose students to the basic concepts of numerical control with G and M codes.

**MT 206A**
**2-D CAD/CAM**
**Computer-Aided Design/Machining**
3 Cr. Hrs. – 5 Contact Hrs.  FWH
Prereq: MT 205A
Using Master CAM software, this class first explores the fundamentals of 2-D CAM systems. Students will learn to use the design package to create part geometry. Toolpaths for these parts will be created using the CAM system to create CNC programs for the mill, and lathe. This course is required for the Machining Technology programs.

**MT 216**
**3-D CAD/CAM**
**Computer-Aided Design/Machining**
3 Cr. Hrs. – 5 Contact Hrs.  F
Prereq: MT 206A
This class continues the study of CAM into the realm of complex 3-D machining. Various complex surfaces will be designed, programmed, and machined. 3-D CNC programs will be created for both the Mill and Wire EDM. 3-D part processing will be covered in detail for each program. The trimming of complex surfaces is stressed. Installation of third-party software and interfacing with CAD software will also be covered. Students will also learn to create tooling and material libraries.
MT 218
5-Axis CNC & CMM
3 Cr. Hrs. – 5 Contact Hrs.  
Prereq: MT216 with a minimum grade of “C”, class must be taken “previous”  
This course introduces 5 axis CNC machining. CAD/CAM software will be utilized to generate 3D models that will then be toolpathed and machined on a 5 axis Vertical Milling Machine. CM Ms will also be taught and utilized. This course is required for the Machining Technology AAS.

MT 222
Machining Capstone
3 Cr. Hrs. – 5 Contact Hrs.  
Prereq: MT216 with a minimum grade of “C”, class must be taken “previous”  
This capstone course comprises of a multifaceted assignment that serves as a culminating academic experience in the CAD/CNC and Machining programs. Students will engage in machining activities encompassing advanced areas of CNC and CAM. Course focus will include areas such as: 4th and 5th axis machining, live tooling, drawing solid models using CAD/CAM systems and product development utilizing 3D scanning and 3-D printer technology. Projects selected by the students must be proposed and then approved by the instructor for appropriate rigor and content.

MT 240
Basic Machine Repair
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: MT 101B  
This course provides a general overview of various mechanical systems found in manufacturing equipment. Both preventive maintenance and repair skills are stressed. The systems examined are: basic mechanics and mechanical skills, lubrication systems, bearings, belt drives, chain drives, gears and gear systems, couplings, fluid power systems and variable speed drives. Troubleshooting techniques are stressed throughout the course.

Management
(See Business)

Marketing
(See Business)
Materials Technology

MET 101
Industrial Materials
3 Cr. Hrs. – 4 Contact Hrs. FW
Prereq: None
Industrial Materials is the study of the many materials which are used by modern industry, their basic similarities and differences, their physical, chemical, and electrical properties, and the ways in which materials are altered or combined to enhance their suitability for a specific industrial application.

MET 102
Basic Cast Metals
3 Cr. Hrs. – 5 Contact Hrs. F
Prereq: None
Basic cast metals is an introductory study of the processes and methods of producing castings. The student will be introduced to patternmaking, finishing, and inspection. Laboratory tests of materials used in cast metals will be conducted. The student will be given an overview of cast metal manufacturing procedures. This course attempts to create a basic understanding and appreciation of the complexities of the cast metal industry.

MET 201
Metallurgy
3 Cr. Hrs. – 5 Contact Hrs. FW
Prereq: None
Metallurgy studies the physical, chemical, and electrical properties of metals and their alloys, as well as the effect on these properties of various mechanical and thermal treatments. The many indications of these properties and tests to establish their magnitude are also included.
Mathematics  
(Includes College Success Center courses)  

Math placement and prerequisites are currently under review and development. All students are encouraged to schedule an appointment and meet with an MCC Counselor to create an academic plan. To view a self-guided placement document that can assist you in selecting the appropriate math course and to view current placement information, go to www.muskegoncc.edu/course-placement/

MATH 035F  
Metrics  
0.5 Cr. Hr. – 0.5 Contact Hr.  
Prereq: None  
This course is an introduction to the metric system and conversions between the metric and English systems.

MATH 085  
Support for Probability and Statistics  
2 Cr. Hrs. – 2 Contact Hrs.  
Coreq: Must be currently enrolled in Math 115A  
This course provides support for students enrolled in Probability and Statistics. Topics may include student success skills; math terms; solving problems; logical reasoning; algebra skills; reading and constructing graphs; and various statistical concepts. Calculators and applications are used.

MATH 087  
Support for Math for Liberal Arts  
2 Cr. Hrs. – 2 Contact Hrs.  
Coreq: Must be currently enrolled in Math 107A  
This course provides support for students enrolled in Math for Liberal Arts. Topics may include student success skills; terminology; properties of numbers; problem solving strategies; logical reasoning; basic algebra skills; reading and constructing graphs; and other topics as necessary to the course. Calculators and applications are used.

MATH 089  
Support for College Algebra  
2 Cr. Hrs. – 2 Contact Hrs.  
Coreq: Must be currently enrolled in Math 109A  
This course provides support for students enrolled in College Algebra. Topics may include student success skills; math terms; algebra literacy; logical reasoning; equations; inequalities; exponents; radicals; functions; graphs; and various algebraic skills. Graphing calculators and applications are used.

MATH 097  
Math Literacy  
4 Cr. Hrs. – 4 Contact Hrs.  
This course is designed for students pursuing a field of study outside of mathematics, science, and engineering. The course integrates numeracy, algebraic reasoning, data literacy, functions, equations, and modeling. Topics include a review of operations with integers and rational numbers, ratios and proportions, percent, conversion of various units, pattern recognition, reading and writing algebraic expressions, use of calculators, application of formulas, solutions of linear and quadratic equations, graphs of linear and exponential functions, linear and exponential models, introduction to data, introduction to displays of data, measures of central tendency, and weighted averages.

MATH 098  
Fundamentals of Algebra  
4 Cr. Hrs. – 4 Contact Hrs.  
This is a course focusing on algebra as the language of mathematics and science. The goals of the course are to develop correct algebraic thinking, writing, and manipulation skills in students. Topics include: Solving linear equations and inequalities, graphing and finding linear equations for given data, solving systems of linear equations, integer exponents, polynomial operations (factoring and factorable equations,) operations with rational expressions, compound inequalities and absolute values, fractional exponents and radicals, graphing parabolas, solving quadratic equations, and applications.
MATH 099
Mathematics for Health Sciences
4 Cr. Hrs. – 4 Contact Hrs. \( \text{FW} \)
This course is intended for students in the health sciences tracks, including pre-majors. The course reviews basic algebraic operations, graphing, and problem solving as the language of mathematics and science. The course also includes unit conversions, the metric system, significant figures, and an introduction to the interpretation of data.

MATH 105
Mathematics for Elementary Teachers
4 Cr. Hrs. – 4 Contact Hrs. \( \text{FWO} \)
Recommended: Math 097, Math 098, or Math 100A with a minimum grade of “C”
Not a “methods” course. A general course for students majoring in elementary education. The basic ideas behind our number system and geometric concepts are discussed. Topics include: problem solving, sets, system of numeration, the real number system, geometry, and metric measure.

MATH 107A
Mathematics for Liberal Arts
4 Cr. Hrs. – 4 Contact Hrs. \( \text{FWSO} \)
Recommended: Math 040, or Math 097, or Math 098 with a grade of C or better.
A survey course for students whose program of study does not require College Algebra or higher coursework. This course satisfies general education requirements, and is a prerequisite to Probability and Statistics (Math 115) and Math for Elementary Teachers (Math 105). Topics covered include: financial mathematics, symbolic logic, probability and counting principles, voting and apportionment methods, set theory and applications, and applications of vertex-edge graphs. The history, language, and usefulness of mathematics will be emphasized throughout the course. Students will be expected to use routine algorithms and engage in critical thinking.

MATH 109A
College Algebra
4 Cr. Hrs. – 4 Contact Hrs. \( \text{FW} \)
Prereq: Placement is self-guided, based on H.S. GPA. Enroll directly if GPA is 2.5 or higher. Prerequisite: Math 098 (taken prior to this course - grade “C” or higher) if GPA is below 2.2.
Coreq: Math 089 if GPA is 2.2 - 2.5.
This is a college-level algebra course, intended primarily for students who will not need to fulfill math requirements beyond this level. Functions are considered in the context of formulas, tables, and graphs, with an emphasis on applications. Functions studied include polynomial, exponential, logarithmic, logistic, power, and rational. Other topics involve modeling data, combining functions, solving equations and inequalities, optimization, and rates of change. Problems will be solved using traditional algebra as well as with technology. Graphing calculators will be utilized.

MATH 115A
Probability and Statistics
4 Cr. Hrs. – 4 Contact Hrs. \( \text{FWCO} \)
Recommended: Math 097, Math 098, Math 099, Math 100A, or Math 107A with a grade of C or better.
NOTE: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.
Probability and statistics for business, social science, biological science, and other majors. Topics include: descriptive statistics including displays of data, probability, probability distributions including the binomial, normal, and Poisson distributions, confidence intervals/or proportions, means, and standard deviations, hypothesis testing/or one and two samples, contingency tables and the chi-square test, analysis of variance, linear regression, and non-parametric statistics (optional.) Methods of instruction include case studies, simulations, and the use of technology.
MATH 141
Precalculus
5 Cr. Hrs. – 5 Contact Hrs. FWS
Prereq: Required Math 098 or Math 100A with a grade of C or better of SAT Math subscore of 28 or higher.

Pre-calculus algebra, analytic geometry, and trigonometry, designed for students who will be taking calculus. Topics include: exponential, radical, and rational expressions; complex numbers; circles, solving equations; functions and their graphs (including polynomial, rational, exponential, logarithmic, trigonometric, and functions involving radicals); inverses of functions and graphs; function composition and transformation; trigonometric identities, equations, and applications; vectors; sequences and series; polar coordinates; parametric equations; and systems of equations. Graphing calculators will be utilized.

MATH 161
Calculus I
4 Cr. Hrs. – 4 Contact Hrs. FWSO
Prereq: Required Math 112 or Math 141 with a grade of C or better or SAT Math subscore of 32 or higher

NOTE: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.

The calculus of elementary functions of one variable. Topics include: definition of a derivative, limits, derivatives and integrals of functions of one variable, related rates, maxima and minima, Rolle’s Theorem, the Mean Value Theorem, and the Fundamental Theorem of Calculus.

MATH 162A
Calculus II
4 Cr. Hrs. – 4 Contact Hrs. FWSO
Prereq: MATH 161 with a minimum grade of “C”
Note: Concurrent enrollment in MATH 276 is recommended. A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.

A continuation of the calculus of functions of one variable. Topics include: methods of integration such as substitution, integration by parts, trigonometric substitution, partial fractions, using tables and technology; improper integrals; applications of integrals to area, volume, arc length, surface area, average value, center of mass, work, probability, economics; parametric and polar functions and enclosed areas and arc lengths of their graphs; infinite sequences, series, convergence and divergence tests; power series for common transcendental functions and their use in evaluation, differentiation, and integration. Time permitting, a brief introduction to differential equation may be provided.

MATH 215A
Statistics for Science & Engineering
3 Cr. Hrs. – 3 Contact Hrs. F
Prereq: MATH 161 with a minimum grade of “C”
Recommended Coreq: MATH 162A

This is a calculus-based introductory statistics course for science and engineering students. Topics include: descriptive and inferential statistics, probability, discrete and continuous probability distributions, joint probability distributions, confidence intervals, hypothesis testing, analysis of variance, correlation and linear regression, non-parametric techniques, and quality control methods. Applications and associated technologies for data science, research, and engineering are integrated into a capstone project.
MATH 276
Linear Algebra with Applications
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: MATH 161  
Recommended Coreq: MATH 162A  
Note: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.
A study of matrices, matrix operations, systems of linear equations, determinants, vectors, real and complex vector operations, vector spaces, eigenvalues, linear transformations, linear programming, and numerical methods. Applications used in science, engineering, business, computer science, and higher mathematics are integrated.

MATH 283
Calculus III
4 Cr. Hrs. – 4 Contact Hrs.  
Prereq: MATH 162A with a minimum grade of “C”  
Note: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.
The calculus of functions of more than one variable. Topics include: vectors, vector functions, surfaces, the Dot Product, the Cross Product, limits and continuity in 3 dimensions, partial derivatives, chain rule for partial derivatives, gradients, multiple integrals, and vector calculus.

MATH 295
Differential Equations with Linear Algebra
4 Cr. Hrs. – 4 Contact Hrs.  
Prereq: MATH 162A with a minimum grade of “C”  
Note: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.
An introduction to the theory and solution of ordinary differential equations with techniques involving slope fields, separation of variables, homogeneous functions, exact equations, linear equations of order one, integrating factors, Bernoulli’s equation, coefficients linear in two variables, Wronskian, differential operators, Method of Undetermined Coefficients, reduction of order, variation of parameters, power series, Euler equation, the Laplace transform, linear systems, higher order linear equations, matrix algebra, eigenvalues, eigenvectors, determinants, and modeling applications in physical, biological, and social sciences. Computer software will be used to explore some of these topics.
MA 101
Medical Assistant Administrative I
3 Cr. Hr. – 3 Contact Hrs
Prereq: Admission to the Medical Assistant Certificate Program and permission of the Medical Assistant Program Director.
This course will provide an introduction to the field of medical assisting and the healthcare team. Basic administrative procedures performed in an ambulatory setting will be introduced. These include professional communications and behaviors, patient reception, office equipment, ethical and legal standards, and the office environment. Students wishing to transfer to the Medical Assistant Certificate Program after taking MA 101 will have to retest their skills for those two courses and a fee will apply (testing must occur within two years of taking the course).

MA 102A L&L
Medical Assistant Clinical I
5 Cr. Hr. – 7 Contact Hrs
Prereq: Admission to the Medical Assistant Certificate Program and permission of the Medical Assistant Program Director
This course provides the student with an introduction to medical office practices, patient intake, screening measures (EKG, PFT) and vital signs, infection control measures, collecting and handling of samples and specimens, assisting the provider during examination, and general medical and environmental asepsis and sterilization of instruments. The student will practice non invasive CLIA waived hematology, chemistry, urinalysis, and immunology testing, and perform basic quality control measures.

MA 105
Medical Assistant Administrative II
2 Cr. Hr. – 2 Contact Hrs
Prereq: MA 101 Medical Assistant Administrative I with a grade of a C+ or better
This course is a continuation of Medical Assistant Administrative I. This course covers more advanced administrative topics such as financial management and also reviews medical office administrative procedures. Students wishing to transfer to the Medical Assistant Certificate Program after taking MA 105 will have to retest their skills for those two courses and a fee will apply (testing must occur within two years of taking the course).

MA 106A L&L
Medical Assistant Clinical II
6 Cr. Hr. – 8 Contact Hrs
Prereq: MA 101, MA 102A L&L with a grade of a C+ or better.
This course is a continuation of Medical Assistant Clinical I and further develops the student skills, abilities and behaviors in the role of Clinical Medical Assistant. This course prepares the student to assess of vital signs, prepare the patient for examination, assist the provider during examination, safely calculate drug dosages, administer medications by oral and injectable routes, perform venipuncture, set up and assist with minor office surgeries, and clean and sterilize instruments.
**MU 50PVT-89PVT**  
**Remedial Applied Music**  
*2 Cr. Hrs. – 2 Contact Hrs.*  
**Prereq:** Instructor permission  
The following courses are designed for students who do not meet the freshman performance proficiency level as determined by the faculty. Recommendation for participation in 100-numbered applied music courses will be made when the faculty feels that adequate advancement has been made by the student to perform at the level of a freshman music student.

- **MU 050PVT, 051PVT**  
  Voice

- **MU 052PVT, 053PVT**  
  Piano

- **MU 054PVT, 055PVT**  
  Cornet (Trumpet)

- **MU 056PVT, 057PVT**  
  Clarinet

- **MU 058PVT, 059PVT**  
  Trombone

- **MU 060PVT, 061PVT**  
  Baritone (Euphonium)

- **MU 062PVT, 063PVT**  
  Tuba

- **MU 064PVT, 065PVT**  
  French Horn

- **MU 066PVT, 067PVT**  
  Flute

- **MU 068PVT, 069PVT**  
  Oboe (English Horn)

- **MU 070PVT, 071PVT**  
  Bassoon

- **MU 072PVT, 073PVT**  
  Saxophone

- **MU 074PVT, 075PVT**  
  Percussion

- **MU 076PVT, 077PVT**  
  Guitar

- **MU 078PVT, 079PVT**  
  Organ

- **MU 080PVT, 081PVT**  
  Harp

- **MU 082PVT, 083PVT**  
  Violin

- **MU 084PVT, 085PVT**  
  Viola

- **MU 086PVT, 087PVT**  
  Cello

- **MU 088PVT, 089PVT**  
  Double Bass

**MU 100**  
**Introduction to Music Theory**  
*3 Cr. Hrs. – 3 Contact Hrs.*  
Designed for students with little or no theoretical background who are considering music as their major field, or high school seniors who do not have access to a high school theory course. Includes fundamentals to basic musicianship: notation, clefs, scales, intervals, triads, rhythm, meter and tonality.

**MU 101**  
**Music Theory**  
*3 Cr. Hrs. – 3 Contact Hrs.*  
**Prereqs:** MU 190A and MU 194  
**Coreqs:** MU 190A and MU 194  
Fundamentals of basic musicianship, including notation, clefs, scales, intervals, triads, meter, rhythm and tonality. The analysis and writing of harmony in the styles of composers of the tonal period will be stressed.

**MU 102**  
**Music Theory**  
*3 Cr. Hrs. – 3 Contact Hrs.*  
**Prereqs:** MU 101 and MU 190A  
**Coreqs:** MU 191A and MU 195  
A continuation of MU 101.

**MU 103A**  
**Music Appreciation**  
(formerly MU 103)  
*3 Cr. Hrs. – 3 Contact Hrs.*  
A first course in listening to music designed primarily for students with little or no musical training. Starting with the basic elements of music, the course uses extensive audio and visual materials, illustrating the development of music through the ages.

**MU 104CS**  
**College Singers**  
*1 Cr. Hr. – 2 Contact Hrs.*  
This is a performance ensemble for students with previous musical experience. Auditions will be held at the first class session for placement within the group and to verify that the student and ensemble are a reasonable match. High standards of musical performance are upheld. There are performances held throughout the year for student and adult audiences.

**MU 105CS**  
**College Singers**  
*1 Cr. Hr. – 2 Contact Hrs.*  
An extension of MU 104CS.
MU 106A
Collegiates
1 Cr. Hr. – 2 Contact Hrs. FW
Prereq: none.
Coreq: MU 104CS or MU 104NC or 
       MU 105CS or MU 105NC
A select SATB vocal performance ensemble for students with previous musical experience. This ensemble performs a wide repertoire of music from the 17th century to present day of varied genres. Auditions will be held prior to the first class session for placement within the group and to verify that the student and ensemble are a reasonable match. High standards of musical performance are upheld.

MU 108CB
Concert Band
(West Michigan Concert WINDS)
1 Cr. Hr. – 2 Contact Hrs. FW
This is a performance ensemble for students with previous musical experience. Auditions will be held at the first class session for placement within the group and to verify that the student and ensemble are a reasonable match. High standards of musical performance are upheld. There are performances held throughout the year for student and adult audiences.

MU 109CB
Concert Band
(West Michigan Concert WINDS)
1 Cr. Hr. – 2 Contact Hrs. FW
An extension of MU 108CB.

MU 110 A, B, C, D, E, F
Jayhawk Sound
1 Cr. Hr. – 2 Contact Hrs. FW
This ensemble performs a wide variety of popular music and musical cheers at MCC sports events and plays a vital role in supporting the athletes and athletic teams at MCC. In addition to the weekly rehearsals the ensemble performs at MCC sports events both on-off campus.

MU 111 A, B, C, D, E, F
Wind Ensemble
1 Cr. Hr. – 2 Contact Hrs. FW
An advanced-level wind ensemble performing traditional to contemporary wind-band literature. The ensemble focuses on the rehearsal and performance of the repertoire. In addition to the biweekly rehearsals the ensemble performs two to four times per semester both on-off campus.

MU 117 A, B, C, D, E, F
Jazz Ensemble
1 Cr. Hr. – 2 Contact Hrs. FW
Ensemble dedicated to increasing the knowledge of jazz literature and improving skills in improvisation and ensemble playing through the preparation and performance of traditional and contemporary big-band jazz repertoire. In addition to the biweekly rehearsals the ensemble performs two to four times per semester both on-off campus.

MU 118HON
Honors Orchestra
(formerly MU 118YSO)
1 Cr. Hr. – 2 Contact Hrs. FW
Students who play in the Honor’s Orchestra may receive college ensemble credit. This is a performance ensemble for students with previous musical experience. Auditions will be held at the first class session for placement within the group and to verify that the student and ensemble are a reasonable match.

MU 119A or B
Symphonic Ensemble
1 Cr. Hr. – Variable Contact Hrs. D
Prereq: MU 118WMS or MU 118YSO
A continuation of MU 118WMS or MU 118YSO.

MU 127 to 147
Applied Music: Secondary Instrument
1 Cr. Hr. – Variable Contact Hrs. FW
Prereq: Instructor permission
Private study on an instrument. The student must meet with a private instructor a specified number of hours Attendance at studio class may be required and performance is encouraged. Letters A, B, C, D, after number indicate semesters so that the correct number of credits will be shown on transcript.
MU 148PVT to 189PVT
Applied Music: Primary Instrument
2 Cr. Hrs. – Variable Contact Hrs.  
Prereq: Instructor permission

Intensive private study on an instrument. Must meet with a private instructor a specified number of hours per semester. Attendance and performance at studio class may be required. There is a public recital at the end of the year.

MU 170PVT, 171PVT BASSOON
(CONTRA-BASSOON)
MU 172PVT, 173PVT SAXOPHONE
MU 174PVT, 175PVT PERCUSSION
MU 176PVT, 177PVT GUITAR
MU 178PVT, 179PVT ORGAN
MU 180PVT, 181PVT HARP
MU 182PVT, 183PVT VIOLIN
MU 184PVT, 185PVT VIOLA
MU 186PVT, 187PVT CELLO
MU 188PVT, 189PVT DOUBLE BASS

NOTE: There are several sections of class piano. Students with piano background should audition with instructor before enrolling.

MU 190A
Class Piano for Music Majors
2 Cr. Hrs. – 3 Contact Hrs.  
Coreqs: MU 101 and MU 194 or instructor permission

This course is required of all music majors and is open also to students with some previous keyboard experience who can use these transferable humanities credits or desire the training. Special emphasis is given to sight-reading, transposition, playing by ear, harmonizing melodies, accompaniments and scales.

MU 190B
Class Piano (Non-Music Majors)
2 Cr. Hrs. – 3 Contact Hrs.  
This course is open to any student who wishes to learn to play the piano. No previous training or knowledge of music is necessary.

MU 190C
Class Piano
1 Cr. Hr. – 2 Contact Hrs.  
Coreq: MU 192

This course in basic piano is a required corequisite for students in MU 192 or DMU 101 unless requirements can be met by examination. See instructor.

MU 191A
Class Piano for Music Majors
2 Cr. Hrs. – 3 Contact Hrs.  
Prereq: MU 190A
Coreqs: MU 102 and MU 195 or instructor permission

A continuation of MU 190A.

MU 191B
Class Piano (Non-Music Majors)
2 Cr. Hrs. – 3 Contact Hrs.  
Prereq: MU 190B

A continuation of MU 190B.

MU 191C
Class Piano
1 Cr. Hr. – 2 Contact Hrs.  
Prereq: MU 190C

This course in basic piano is a required corequisite for students in the second semester of the Digital Music and Audio Certification: Music track, unless requirements can be met by examination. See instructor.
MU 192  
Music for the Classroom Teacher  
4 Cr. Hrs. – 4 Contact Hrs.  
Coreq: MU 190C  
This course is required for future elementary classroom teachers. No previous musical training is necessary. The course provides a background in the fundamental elements of music through singing, playing classroom rhythm and melody instruments, recorder and autoharp. Includes introduction to methods of teaching music, observation and participation in area schools.

MU 193A  
Hip-Hop, Rock, and All the World’s Music  
3 Cr. Hrs. – 3 Contact Hrs.  
World Music is an introduction to the music of selected world cultures, including South and Central America, Africa, India, China, and North America. Every class will require some listening and reading/research on the part of the student. As an introductory class, no prior technical experience with music is required. Students will also write a performance-analysis of a musical event (approved by the instructor) outside of class.

MU 194  
Sight-Reading and Ear Training  
1 Cr. Hr. – 2 Contact Hrs.  
Coreqs: MU 101 and MU 190A  
The acquisition of the skills of melodic and rhythmic sight-reading and the disciplining of the ear to reproduce melodies, harmonies and rhythms by dictation.

MU 195  
Sight-Reading and Ear Training  
1 Cr. Hr. – 2 Contact Hrs.  
Prereq: MU 194  
Coreqs: MU 102 and MU 191A  
A continuation of MU 194.

MU 201  
Advanced Theory  
4 Cr. Hrs. – 5 Contact Hrs.  
Prereqs: MU 101 and MU 102  
Coreq: MU 290  
A continuation of Theory required of music majors. It combines the elements of counter-point, form analysis and 20th century practices with an emphasis on creative writing and arranging. Advanced sight-singing and melodic, harmonic, and rhythmic dictations are also stressed.

MU 202  
Advanced Theory  
4 Cr. Hrs. – 5 Contact Hrs.  
Prereq: MU 201  
Coreq: MU 291  
A continuation of MU 201.

MU 203  
Vocal and Instrumental Conducting Techniques  
2 Cr. Hrs. – 2 Contact Hrs.  
Practical methods and conducting techniques for instrumental and vocal ensembles, with emphasis on rehearsal preparation, interpretation and performance, and basic communication between conductor and ensemble members.

MU 240  
Professional Practices in Music  
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: None  
This course introduces students to career options and common business practices in the music industry. Students learn how to market their music and music performances along with how to promote themselves within the industry, through the use of multimedia which includes Web and print resources. Students are exposed to contract preparation, intellectual property considerations and introduced to performing arts unions. A key component to this course is the study of ethical practices within the music industry.
MU 248 to 289
Applied Music - Advanced Instrument
2 Cr. Hrs. – 2 Contact Hrs. FWS
Prereq: Instructor permission
Note: Student must first complete two semesters of 100-level study on the same instrument.
Private study of an instrument.
The student must meet with private instructor a minimum of 13 hours per semester. Attendance and performance at studio is required. There is a staff audition at the end of each semester and a public recital at the end of the year.

MU 248, 249
JAZZ GUITAR
MU 250, 251
VOICE
MU 252, 253
PIANO
MU 254, 255
CORNET (TRUMPET)
MU 256, 257
CLARINET
MU 258, 259
TROMBONE
MU 260, 261
BARITONE (EUPHONIUM)
MU 262, 263
TUBA
MU 264, 265
FRENCH HORN
MU 266, 267
FLUTE
MU 268, 269
OBOE (ENGLISH HORN)

MU 270, 271
BASSOON
(MUTRA-BASSOON)
MU 272, 273
SAXOPHONE
MU 274, 275
PERCUSSION
MU 276, 277
GUITAR
MU 278, 279
ORGAN
MU 280, 281
HARP
MU 282, 283
VIOLIN
MU 284, 285
VIOLA
MU 286, 287
CELLO
MU 288, 289
DOUBLE BASS

MU 290
Class Piano
2 Cr. Hrs. – 3 Contact Hrs. W
Coreq: MU 201
A continuation of the freshman piano class plus the addition of clef and vocal score reading. Required of all music majors unless they are able to pass the requirements at the end of their freshman year.

MU 291
Class Piano
2 Cr. Hrs. – 3 Contact Hrs. W
Prereq: MU 290
Coreq: MU 202
A continuation of MU 290.
Nursing

AH 111
Environmental Stressors and Nutrition
1 Cr. Hr. – 1 Contact Hr.
Prereq: NUR 100 (must complete with C+ or better).
Note: Course restricted to current nursing students.

This course is designed to provide the student with the theoretical foundation for the clinical application of nutrition principles in relation to stress adaptation throughout the nursing curriculum. The focus of the course is on the identification of the role of nutrients in maintaining man’s dynamic equilibrium and the use of therapeutic diets for clients. This course is only open to Nursing students.

NUR 100
Overview of the Nursing Profession
1 Cr. Hr. – 1 Contact Hr.
Prereq: Must complete all entry-level requirements and receive an acceptance letter into the Nursing Program.
Coreq: (Unless previously completed successfully) ENG 101, PSYC 201 L&L, ANTH 103, BIOL 152 L&L (formerly BIOL 105).
Note: Course restricted to current Nursing students.

This course is designed to provide students with an overview for a career in the profession of nursing. The focus of the course is on the roles and responsibilities of the licensed practical nurse and the registered nurse as members of the health care delivery team. Emphasis is placed on current issues and trends in nursing practice and education, and the derivation of medical terminology.

NUR 121A
Basic Pharmacology
1 Cr. Hr. – 1 Contact Hr.
Prereqs: BIOL 152L&L (formerly BIOL 105).
Note: Course restricted to current nursing students.

This course is designed to provide the student with the theoretical foundation for the clinical application of pharmacology throughout the curriculum. The focus of the course is on the identification of the major drug classifications. Emphasis is placed on the identification of the basic mode of action, therapeutic effects, adverse effects, nursing implications, and patient teaching for the most common drug groups within each classification.

NUR 126
Family Health & Nursing Care
7 Cr. Hrs. - 15 Contact Hrs.
Prereqs: AH 111 with a minimum grade of C+
Coreq: NUR 121A with a minimum grade of C+
Note: Course restricted to current nursing students.

This course is designed to provide the student with the theoretical and clinical foundation for nursing practice in the care of the family. The student will use the nursing process to prioritize health needs, promote wellness, and facilitate stress adaptation with the client and family. Emphasis is placed on nursing assessment skills, nurse and patient safety, and health promotion with childbearing families.

NUR 131B
Care of the Childrearing Family
8 Cr. Hrs. – 16 Contact Hrs.
Prereq: NUR 121A and NUR 126 with a minimum grade of C+
Coreq: Recommended: (Unless previously completed successfully with a grade of C or better) BIOL 252 L&L (formerly BIOL 106 L&L) must be completed with a C or better.
Note: Course restricted to current nursing students.

This course is designed to provide the student with the theoretical foundation for facilitating stress adaptation related to childrearing. The focus of the course is on the application of previously learned biopsychosocial and nursing principles and processes in the care of the childrearing family. Emphasis is placed on the identification of the changing priority of health needs and adaptation problems associated with infancy through young adulthood.
NUR 141B
Care of the Maturing Family
8 Cr. Hrs. – 16 Contact Hrs. FS
Prereq: NUR 131B with minimum grade of C+
Coreq: Recommended: (unless previously completed successfully with a C or better) Chemistry (see Nursing Career Ladder for options)
Note: Course restricted to current nursing students.
This course is designed to provide the student with the theoretical foundation for facilitating stress adaptation related to adult maturation. The focus of the course is on the application of previously learned biopsychosocial and nursing principles and processes in the care of the maturing family. Emphasis is placed on the identification of the changing priority of health needs and medical adaptation problems associated with middle and late adulthood.

NUR 211A
Care of the Family in Psychological Crisis
4 Cr. Hrs – 8 Contact Hrs. WS
Prereq: NUR 212B with minimum grade of C+
Note: Course restricted to current nursing students.
This course is designed to provide the student with the theoretical foundation for facilitating stress adaptation in clients/families in psychological crisis. The focus of the course is on the identification of biopsychosocial and nursing principles and processes used in the care of clients with mental health needs. Emphasis is placed on all components of the nursing process, therapeutic communication, and collaboration with team members in the care of psychiatric clients.

NUR 212B
Care of the Family in Physiological Crisis
8 Cr. Hrs. – 16 Contact Hrs. FW
Prereq: NUR 141B or all entry-level requirements, an acceptance letter into the Nursing Program, ENG 101, PSYC 201, ANTH 103, BIOL 152 L&L (formerly BIOL 105 L&L), BIOL 252 L&L (formerly BIOL 106 L&L), Chemistry (See Nursing Career Ladder for options), plus valid unencumbered MI LPN license and work experience in the LPN role (LEAP credit may be required).
Coreq: (Unless previously completed successfully) BIOL 207 LEC & BIOL 207A.
Note: Course restricted to current Nursing students.
This course is designed to provide the student with the theoretical foundation for facilitating man’s adaptation to multiple stressors in acute care settings. The focus of the course is on the identification and application of biopsychosocial and nursing principles and processes in the care of the family with complex health needs. Emphasis is placed on the application of all components of the nursing process, including use of advanced psychomotor skills, in the care of adults in physiological crisis.

NUR 222A
Managing the Care of the Family
5 Cr. Hrs. – 11 Contact Hr. WS
Prereq: NUR 211A with a minimum grade of C+
Note: Course restricted to current nursing students.
This course is designed to provide the student with a theoretical foundation for managing the nursing care for groups of individual patients and their families. Previously learned biopsychosocial and nursing principles are integrated into the nurse manager role. Emphasis is placed on the use of management principles, the nursing process, trends in nursing, and transition into the registered nurse role.
Philosophy

PHIL 101
Basic Concepts of Philosophy
3 Cr. Hrs. – 3 Contact Hrs. FWSO
A course which presents some of the issues, questions and problems of philosophy as these issues and thoughts are developed by traditional and contemporary philosophers.

PHIL 102
Principles of Logic
3 Cr. Hrs. – 3 Contact Hrs. FWSO
A course which aims to give students an understanding of the fundamental forms of rational argument and critical reasoning skills that can be used in a wide range of disciplines and careers. There will be an examination of deductive and inductive reasoning, as well as formal and informal fallacies to facilitate the art of distinguishing correct from incorrect reasoning.

PHIL 104
Symbolic Logic
3 Cr. Hrs. – 3 Contact Hrs. W
This is an introductory course in Symbolic Logic, or the art of formal reasoning. It should be of special value to anyone with an interest in mathematics, computer programming, the sciences, or philosophy. Students will learn how to work with various classical and modern formal languages such as syllogistic logic, propositional logic, modal logic, and quantificational logic, and develop the ability to think in any discipline with greater clarity, precision, and understanding. No philosophy prerequisites are needed for this course, and in particular, it is not necessary to have taken PHIL 102 Principles of Logic before enrolling in PHIL 104.

PHIL 105
World Religions
3 Cr. Hrs. – 3 Contact Hrs. W
In this course students will learn to understand and critically evaluate the beliefs and practices of the world’s major religious traditions and will study the ways in which they impact societies and individuals. Traditions such as Confucianism, Daoism, Hinduism, Buddhism, Judaism, Christianity, Islam, and Humanism, among others, may be covered.

PHIL 202
Introduction to Ethics
3 Cr. Hrs. – 3 Contact Hrs. F
An inquiry into both the good of the individual person and the good of society. Two-thirds of the course presents logic and an in-depth analysis of such ethical theories as relativism, egoism, utilitarianism, deontology, virtue ethics, religion, and contractarianism. One-third of the course will examine a varying assortment of such applied ethical issues as euthanasia, abortion, distributive justice, sexual ethics, and environmental ethics.

PHIL 203
Philosophy of Religion
3 Cr. Hrs. – 3 Contact Hrs. F
This course is an introduction to philosophical thinking by way of the philosophy of religion. It deals with metaphysical, epistemological and ethical issues raised by different religious practices, experiences, and beliefs, and should be of interest to believers and nonbelievers alike. Students both with and without previous academic philosophical experience are all welcome to enroll.

PHIL 204
Biomedical Ethics
3 Cr. Hrs. – 3 Contact Hrs. FWOS
Prereq: ENG 101
An inquiry into many ethical problems which are particularly connected to the health care professions, but which are of concern to all persons. Issues studied include: professional responsibility in medicine, paternalism, patients’ rights, medical experimentation, the right to die, abortion and the right to health care in the context of limited societal resources. About one-third of the course consists of a survey of those issues and results of ethical theory and logic which sharpen perception, reduce confusion and encourage headway.
PHIL 205
Business Ethics
3 Cr. Hrs. – 3 Contact Hrs.  
One-third of this course presents basic ethical theory and logic which together facilitate a deeper understanding of ethical problems. The second third covers those ethical problems that are apt to confront the business person directly and frequently. The final third of the course is an inquiry into broader ethical problems confronting business and society.

PHIL 207
Environmental Ethics
3 Cr. Hrs. – 3 Contact Hrs.  
One-third of this course presents basic ethical theory and logic that together facilitate a deeper understanding of ethical problems. Two-thirds of the course will explore issues in environmental ethics such as various attitudes toward nature, individual and public policy choices that affect the local and global environment, sustainability, the moral status of animals, and the proper role of science and technology in an environmentally sensitive world.
Physical Education

(See Dance for DNC course descriptions)

All Muskegon Community College Physical Education activity classes are open to both men and women. The strength and physical ability required should be carefully considered in registering for individual or team activities.

Students pursuing a General ASA degree must take PEA 121 or one credit hour from: PEA 101A, PEA 103, PEA 104A, PEA 118, or PEA 201 and one PEA/DNC credit hour of choice to satisfy graduation requirements.

Many classes are offered on the modular system (fewer than fifteen weeks) to take advantage of Michigan weather. Most modular classes are 7 weeks. Check the schedule of classes for starting date. Classes meet in the gym for the initial meeting unless noted on MyMCC.

Although it is still highly recommended, a physical examination is not mandatory for physical education activity classes. The physical education requirement may be waived by a medical excuse based on a physician’s signed statement. Where the physical education requirement has been waived, the student must still complete 62 credit hours to earn a degree.

Some courses require payment of a fee in addition to tuition.

---

Physical Education - Activity

PEA 100C
Hatha Yoga
1 Cr. Hr. – 2 Contact Hrs. FW/O
Basic postures, nutrition, meditation and the psychological and philosophical principles of yoga will be studied. Breath control and focusing the mind are practiced throughout the course. A MCC HPER physical release is required before the start of any activity.

PEA 101A
Fitness, Wellness & Nutrition
1 Cr. Hr. – 2 Contact Hrs. FWSO
A study of the body functions as they relate to exercise, postural alignment, good nutrition and diet. Students will understand and experience factors important to the physical, psychological and social well-being of the individual. Individual physical fitness testing, exercise programs, leisure-time exploration and consumer skill development will be presented. A MCC HPER physical release is required before the start of any activity.

PEA 103
Weight Training
1 Cr. Hr. – 2 Contact Hrs. FWSO
Weight training is a course which covers objectives, fundamental skills, safety suggestions and procedures to develop individual conditioning and weight training programs. Performance and written tests are given. A MCC HPER physical release is required before the start of any activity.

PEA 104A
Walking, Jogging and Conditioning
1 Cr. Hr. – 2 Contact Hrs. FWSO
A course designed for individuals interested in establishing a physical fitness program emphasizing the cardiovascular component. The class includes individually prepared programs of walking/jogging, flexibility and muscular endurance conditioning. A MCC HPER physical release is required before the start of any activity.

PEA 105
Pocket Billiards
1 Cr. Hr. – 2 Contact Hrs. W
This course is designed to teach the various games of pocket billiards. It will include rules, regulations, the fundamentals of the different games, and match play tactics and tournament competition. A MCC
HPER physical release is required before the start of any activity.

PEA 107
Archery
1 Cr. Hr. – 2 Contact Hrs. **Fall, Winter**
Fundamental skills, techniques and rules of archery are practiced and studied, shooting 10-160 yards. A MCC HPER physical release is required before the start of any activity.

PEA 108
Bowling
1 Cr. Hr. – 2 Contact Hrs. **Fall, Winter**
This course includes history, rules, courtesies, fundamental skills, and team competition. (Fee) A MCC HPER physical release is required before the start of any activity.

PEA 109
Sport Judo and Self-Defense
1 Cr. Hr. – 2 Contact Hrs. **Fall, Winter**
Prereqs: Be at least 14 years old
The course will include a history of the sport, basic individual fundamentals, rules interpretation, courtesies and self-defense techniques. A MCC HPER physical release is required before the start of any activity.

PEA 114
Golf I
1 Cr. Hr. – 2 Contact Hrs. **Fall, Spring**
Fundamentals, skills, strategies and rules of golf are practiced and studied. Practice on the driving range, putting green and actual play are included. Skill and written testing. (Fee) A MCC HPER physical release is required before the start of any activity.

PEA 116
Tennis I
1 Cr. Hr. – 2 Contact Hrs. **Fall**
This course includes the history, explanation of rules and regulations, practice of fundamental skills and class tournament competition. Skill and knowledge testing. A MCC HPER physical release is required before the start of any activity.

PEA 118
Cycling
1 Cr. Hr. – 2 Contact Hrs. **Fall, Spring**
This course is designed to introduce the individual to the activity of cycling. The class will include safety factors of cycling and a progressive cycling program. Fitness and written testing are included. A MCC HPER physical release is required before the start of any activity.

PEA 121
Human Movement Science
3 Cr. Hrs. – 3 Contact Hrs. **Fall, Winter, Spring, Online**
This course will explore the past, present, and future of human movement science highlighting professional preparation and opportunities. Physical fitness and health behaviors will be introduced, as well as an opportunity to develop a personal fitness program to begin building a healthy lifestyle. A MCC HPER physical release is required before the start of any activity.

PEA 139A
Basic Canoeing/Kayaking
1 Cr. Hr. – 2 Contact Hrs. **Fall, Spring**
This course is designed for those students who wish to gain additional knowledge and skill in the sports of canoeing and kayaking. The course will cover the history, equipment design, regulations, skills and techniques involved in safe paddling in flat, open and swift water. For admittance into the course, the student must have swimming ability sufficient to enable him/her to maintain himself/herself in the water for ten minutes comfortably and calmly, with relaxation and gentle movements, while clothed in shirts, trousers and tennis shoes or the equivalent. A MCC HPER physical release is required before the start of any activity.
COURSE DESCRIPTIONS

PEA 154A
Volleyball I
1 Cr. Hr. – 2 Contact Hrs. F
The fundamental skills, rules, strategies and courtesies of power volleyball are practiced and studied. Written and skill testing are required. A MCC HPER physical release is required before the start of any activity.

PEA 155
Basketball I
1 Cr. Hr. – 2 Contact Hrs. FW
This course includes: history, explanation of rules, basic individual fundamentals, offensive and defensive theory and testing of individual skills and knowledge. A MCC HPER physical release is required before the start of any activity.

PEA 156
Beach Volleyball
1 Cr. Hr. – 2 Contact Hrs. FS
Note: First class meets in the Bartels-Rode Gymnasium at MCC.
The fundamental skills, rules, strategies and courtesies of beach volleyball are practiced and studied. Opportunity to play, officiate and critique will be offered. Written and skill testing are required. A MCC HPER physical release is required before the start of any activity.

PEA 164
Zumba Movement for Fitness
1 Cr. Hr. – 2 Contact Hrs. FW
Zumba is Spanish and means “to move fast and have fun”. It is a sizzling fusion of traditional Cumbia, salsa, samba and merengue paired with pulsating Latin rhythms mixed with international dance steps. Sizzling music really makes this class. A MCC HPER physical release is required before the start of any activity.

PEA 165
Tai Chi
1 Cr. Hr. – 2 Contact Hrs. FW
Prereq: A MCC HPER physical release is required before the start of any activity.
Research, practice, and application of the basic concepts, and internal and external aspects of Tai Chi. Students will use this traditional Chinese martial art and health practice to develop a gentle, healthy, personal, and life-long exercise.

PEA 200
Kundalini Yoga
1 Cr. Hr. – 2 Contact Hrs. FWGSO
Basic postures, meditation, nutrition, and psychological and philosophical principles of kundalini yoga will be studied. Breath control, mantra (aloud and silent), and focusing the mind are practiced throughout the course. A MCC HPER physical release is required before the start of any activity.

PEA 201
Aerobic Movement For Fitness
1 Cr. Hr. – 2 Contact Hrs. FWGSO
An introduction to aerobic fitness programs and routines. Students will learn simple aerobic routines including steps set to music, achieving better cardiovascular endurance, muscular strength, overall flexibility and individual fitness testing. A MCC HPER physical release is required before the start of any activity.

PEA 209
Sport Judo and Self Defense II
1 Cr. Hr. – 2 Contact Hrs. FW
Prereqs: PEA 109 and be at least 14 years old, and have basic experience in some martial art such as judo, jujutsu, karate, self-defense or other similar art.
Sport judo and self-defense II (jujutsu) will include advanced techniques enabling the student to become more skilled in martial arts such as kata (forms) and shiai (competition)

PEA 214A
Golf II
1 Cr. Hr. – 2 Contact Hrs. FW
Prereq: PEA 114
This course is designed for those students who wish to play, teach or coach the game of golf. Normally considered to be for the intermediate student of golf. A MCC HPER physical release is required before the start of any activity. (Fee)
Physical Education - Professional

PEP 100  
Foundations of Physical Education  
2 Cr. Hrs. – 2 Contact Hrs. 
Prereq: None  
An orientation to the profession of physical education, its history, basic principles, relation to growth and mental health and vocational opportunities. This course is intended for all students who wish to major or minor in physical education and/or related fields.

PEP 200  
Essentials of Personal Training  
3 Cr. Hrs. – 3 Contact Hrs.  
Coreq: In order to sit for the NASM CPT test, candidates must have valid CPR certification. American Red Cross CPR certification is recommended. Visit www.recross.org/take-a-class? for information on local (including online) course offerings.  
Students will learn about the essentials to personal training. Students will be introduced to the human movement system, the Optimal Performance Training (OPT) model and other domains of exercise science; assessment; exercise technique and training instruction; program design; considerations in nutrition; client relations and behavioral coaching. Students will be responsible for five (5) hours of job shadowing, and will be responsible for implementing programming for peers. This class is intended for students who want to become a Certified Personal Trainer (CPT). Training certification will be a component of the course. A MCC HPER physical release is required before the start of any activity.

PEP 203  
Fundamentals of Coaching  
3 Cr. Hrs. – 3 Contact Hrs.  
This course is designed for both experienced and novice coaches interested in understanding and/or improving their professional coaching skills. Topics to be covered include: philosophy, growth and development, sports safety training, psychology, litigation/liability and sports management. This class is intended for students who want to become a certified coach. Training certification with the MHSAA will be a component of the course.

Physical Science

PHSC 101A  
Introductory Physical Science  
Lecture and Lab  
4 Cr. Hrs. – 6 Contact Hrs.  
Recommended: MATH 098  
This is a course for non-science majors offering students a broad exposure to the physical sciences. The approach to this course is conceptual and contemporary, and includes topics from various physical sciences. Students will use both empirical and theoretical evidence to gain an understanding of the fundamental laws that govern the universe.
Physics

PHYS 201CL&L
College Physics I Lecture and Lab
(formerly PHYS 201)
5 Cr. Hrs. – 7 Contact Hrs.  
Prereq: MATH 112
An integrated lecture and lab course that develops, by means of lecture and laboratory experience, a basis for understanding the physical aspects of phenomenon classified as mechanics, heat, and waves (sound). This course is especially suitable for pre-professional students such as pre-med, pre-law, pre-dental, and life science and liberal arts majors.

PHYS 202CL&L
College Physics II Lecture and Lab
(formerly PHYS 202)
5 Cr. Hrs. – 7 Contact Hrs.  
Prereq: PHYS 201CL&L
An integrated lecture and lab continuation of PHYS 201 which considers the physical aspects of phenomenon classified as magnetism, electricity, light, and nuclear physics. This course is especially suitable for pre-professional students such as pre-med, pre-law, pre-dental, and life science and liberal arts majors.

PHYS 203L&L
Engineering Physics I
5 Cr. Hrs. – 7 Contact Hrs.  
Prereq: MATH 161 (or higher), previously or concurrently
NOTE: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.
A course designed for students majoring in engineering, mathematics or the physical sciences. Lectures, labs, demonstrations, discussions and problems on the principles of mechanics, sound, waves, heat and thermodynamics. Computer applications included.

PHYS 204L&L
Engineering Physics II
5 Cr. Hrs. – 7 Contact Hrs.  
Prereqs: MATH 161 and PHYS 203L&L
Coreq: MATH 162A or higher (either previous or concurrent)
NOTE: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.
A continuation of PHYS 203L&L. Lectures, labs, demonstrations, discussions, and problems on the principles of electricity, magnetism, circuits, light, and modern physics. Computer applications included.
Political Science

PSCI 111
Introduction to American Government
4 Cr. Hrs. – 4 Contact Hrs. FWSO
A study of the structure and function of U.S. national, state, and local government emphasizing the basic rights and responsibilities of citizenship, as well as an introduction to basic forms and philosophies of government.

PSCI 202
International Relations
3 Cr. Hrs. – 3 Contact Hrs. FO
This course examines political relationships worldwide. It will include the analysis of conflicts in the world, and how nations search for peace through the United Nations. Additional areas to be examined are international law, the World Trade Organization, the International Monetary Fund, the World Bank, currency exchange rates, the integration of trade blocs like the European Union, environmental pollution, and economic development.

PSCI 205
Contemporary Political Issues in United States Government
3 Cr. Hrs. – 3 Contact Hrs. FWO
Recommended prereq: PSCI 111
An intensive study and critical analysis of contemporary political issues in U.S. Government involving issues that deal with some or all of the following: basic concepts of U.S. democracy, state-federal relationships, government finance, political interest groups, legislative powers, executive powers, judicial powers, civil rights, civil liberties, and international relations.

PSCI 210A
International Organizations – United Nations
1 Cr. Hr. – 1 Contact Hr. D
Prereq: PSCI 111 or instructor permission
This course concentrates on the objectives, functions and structure of international organizations, specifically the United Nations. This course will prepare and provide students an opportunity to participate in an off campus conference featuring simulations of the United Nations.

PSCI 210B
International Organizations – Arab League
1 Cr. Hr. – 1 Contact Hr. D
Prereq: PSCI 111 or instructor permission
This course concentrates on the objectives, functions and structure of international organizations, specifically the Arab League. This course will prepare and provide students an opportunity to participate in an off campus conference featuring simulations of the Arab League.

PSCI 211
Comparative World Government
3 Cr. Hrs. – 3 Contact Hrs. WO
This course will compare governments in various European, American, Asian, and African states. Students will examine political, cultural, economic, and historical reasons for similarities and differences between nations. The United States will be used as a model for comparison.

PSCI 220
Labor Studies
3 Cr. Hrs. – 3 Contact Hrs. F
A survey course studying and critically analyzing the historical, political, and legal frameworks of the labor movement, major labor laws, causes and purposes of the labor movement, union structure and behavior, and labor-management approaches to solving employment disputes in the U.S. and internationally.
Psychology

PSYC 102
Applied Psychology
3 Cr. Hrs. – 3 Contact Hrs. FWSO
This course focuses on the practical application of psychological principles in everyday life. A variety of psychological perspectives will be utilized to enhance students’ ability to understand and change behavior. This course is designed for those in Certificate Programs and those seeking personal enrichment. This course is not intended as a transfer course, though it may be accepted at some transfer schools for elective psychology credit. For those who wish to earn a Bachelor’s Degree, PSYC 201, General Psychology is the recommended transfer course.

PSYC 201
General Psychology
4 Cr. Hrs. – 4 Contact Hrs. FWSO
This course provides an academic survey of research methods and statistics, and in-depth study of neuroscience, development, learning/memory, sensation/perception, states of consciousness, motivation/emotion, stress/health, disorders/therapy, and social psychology. It is especially recommended for those who plan to continue their education beyond the associate degree level.

PSYC 203
Abnormal Psychology
4 Cr. Hrs. – 4 Contact Hrs. FWO
Prereq: PSYC 201 with a minimum grade of “C”
Students will study the etiology, assessment, diagnosis, and treatment of psychological disorders in adults and children. They will learn about the biological, psychological, and sociocultural perspectives on these disorders, along with the related legal and ethical issues.

PSYC 207
Life Span Development
4 Cr. Hrs. – 4 Contact Hrs. FWO
Prereq: PSYC 201 with a minimum grade of “C”
This course will survey the psychological research and theory of patterns of biological, cognitive, emotional, and social development from conception through death.

PSYC 209
Psychological Disorders of Childhood
3 Cr. Hrs. – 3 Contact Hrs. WO
Prereq: PSYC 201 with a minimum grade of “C”
This course provides a topical survey of the area of childhood psychological disorders. This course will include an examination of assessment, diagnosis, and treatments of various behavioral, emotional, and developmental/learning disorders commonly found during childhood and adolescence. In addition, child maltreatment and non-accidental trauma will also be discussed.

PSYC 210
Social Psychology
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: PSYC 201 or SOC 101
Social psychology focuses on how an individual’s thoughts, feelings, and actions are influenced by others. This course will survey the research and theory of patterns of social identity, social influence, social perception, and social cognition. Additional topics include altruism, aggression, attitude change, and interpersonal attraction. There is an ongoing emphasis on how social psychology applies to medicine, the law, and work organizations.
Quality Control

QC 101
Basic Quality Control
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: None
This course presents practical approaches to quality problems. It includes study of basic techniques and laboratory workshop periods in developments of functional quality control. These include charting, sampling, analyzing probability relations, frequency distributions, vendor control, diagnosing the cause of defects, quality improvement and supervisory obligations.

QC 105
Quality and Productivity Using SPC-Statistical Process Control
3 Cr. Hrs. – 3 Contact Hrs. WO
Prereq: QC 101
This course instructs students in the methods and techniques of improved quality of productivity in all types of business and industry. Students are taught to understand the impact of foreign and domestic competition on their own organization and/or future employers. Topics covered include: operating a prevention system versus a detection system of quality control, defining and identifying inhibitors to quality and how to overcome them, chart construction, problem-solving using Pareto analysis, process flow charts, and cause and effect diagrams. The course is project-oriented and team-based.

Reading

Because research shows that students are more successful when they enroll in college-level courses right away with additional support as needed, RDG 090 (Integrated Reading and Writing) is only offered as a corequisite support course for ENG 101 (English Composition I). Depending on your confidence in your ability to read and write at the college level, you are invited to enroll in ENG 101 (English Composition I) either with or without the support of RDG 090 (Integrated Reading and Writing). For details about the two courses and for guidance about choosing the option that makes the most sense for you, go to www.muskegoncc.edu/course-placement/

- All English courses use computers for writing, so knowledge of some word processing program is helpful.
- All students are encouraged to schedule an appointment and meet with an MCC Counselor to create an academic plan.
- The Writing Center is a free resource designed to support you throughout the writing process for any college writing assignment. For more information, go to https://www.muskegoncc.edu/college-success-center/writing-center/

To view current placement information and self placement guides, go to www.muskegoncc.edu/course-placement/

RDG 090
Integrated Reading and Writing
3 Cr. Hr. – 3 Contact Hr. FWO
Coreq: ENG 101
This course will focus on the development of effective critical thinking, reading, and writing skills. Students will develop their ability to participate in academic discussions by reading and responding to academic texts and by writing clear sentences, effectively developed paragraphs, and short essays. This course is designed to support students enrolled in ENG 101 and must be taken during the same semester.
Recreation

REC 111
Introduction to Recreation and Leisure

3 Cr. Hrs. – 3 Contact Hrs.
Prereq: None

An examination of the history and development of the park and recreation movement; sociological, economical, psychological and political consideration of leisure and recreation in contemporary societies; professional and service organizations and their interrelationships; and orientation to the professional field.
Respiratory Therapy

RT 101
Respiratory Therapy Physics
1 Cr. Hr. – 1 Contact Hr. Fall
Prereq: None
This course introduces the student to the basic concepts of classical physics used in respiratory care.

RT 102
Basic Patient Care Skills
3 Cr. Hrs. – 4 Contact Hrs. Fall
Prereq: None
This course is designed as a general introduction to patient care. The student will master skills including: vital signs, medical asepsis, isolation techniques, proper body mechanics, and introduce the student to medical terminology, medical vocabulary, medical abbreviations and charting procedures. This course is only open to Respiratory Therapy students.

RT 110A L&L
Equipment and Procedures I
3 Cr. Hrs. – 4 Contact Hrs. Fall
Prereqs: RT 101 and RT 102
Coreq: RT 111LEC
This course is designed to cover equipment and procedures in routine oxygen therapy. Topics included are: the physical properties of gases, manufacture and transport of medical gases, oxygen storage systems, pressure regulating systems, flow regulating systems, oxygen delivery equipment, and oxygen analyzers.

RT 111B
Introduction to Respiratory Therapy
2 Cr. Hrs. – 2 Contact Hrs. Fall
Prereqs: RT 101 and RT 102
Coreq: RT 110A L&L
This course is designed to give an introduction to the field of Respiratory Therapy and to basic medical sciences. Topics included are: the gas laws, physical states and structure of matter, role of energy in chemical and biological systems, acid-base physiology and processes of body metabolism.

RT 120A L&L
Equipment and Procedures II
3 Cr. Hrs. – 4 Contact Hrs. Winter
Prereqs: RT 110A L&L and RT 111LEC
Coreqs: RT 121 and RT 122
This course is designed to familiarize the student with proper techniques and equipment used for the delivery of aerosol/humidity therapy, incentive spirometry, intermittent positive pressure breathing (IPPB) and chest physical therapy.

RT 121
Pharmacology
2 Cr. Hrs. – 2 Contact Hrs. Winter
Prereqs: RT 110A L&L and RT 111LEC
Coreqs: RT 120A L&L and RT 122
This course introduces the student to the general principles of pharmacology and gives an in-depth study of cardiopulmonary drugs.

RT 122
Clinical I
2 Cr. Hrs. – 4 Contact Hrs. Winter
Prereqs: RT 110A L&L and RT 111LEC
Coreqs: RT 121 and RT 120A L&L
This course is designed to introduce the student to patient care. The student will be assigned such responsibilities as general rounds. In addition, students will observe certain respiratory care procedures being performed.

RT 130A L&L
Equipment and Procedures III
3 Cr. Hrs. – 4 Contact Hrs. Spring
Prereqs: RT 120A L&L, RT 121, and RT 122
Coreqs: RT 131, RT 132, and RT 134
This course is designed to present procedural tasks including: intubation, airway care and management, pulmonary function testing and arterial blood gas sampling.

RT 131
Physiology
3 Cr. Hrs. – 3 Contact Hrs. Spring
Prereqs: RT 120A L&L, RT 121, and RT 122
Coreqs: RT 130A L&L, RT 132, and RT 134
This course is designed to give the student an in-depth study of cardiopulmonary physiology.
RT 132
Clinical II
3 Cr. Hrs. – 8 Contact Hrs.
Prereqs: RT 120A L&L, RT 121, and RT 122
Coreqs: RT 130A L&L, RT 131, and RT 134
This course is designed to allow the student to practice techniques mastered in the previous practicum. During this course, the student will also become proficient in performing all basic respiratory care in the hospital.

RT 134
Introduction to Mechanical Ventilation
1 Cr. Hr. – 1 Contact Hr.
Prereqs: RT 120A L&L, RT 121, and RT 122
Coreqs: RT 130A L&L, RT 131, and RT 132
This course is designed to introduce the student to the theories of adult mechanical ventilation. Emphasis will be placed on patient assessment, indications, modes of ventilation, and management of the mechanically ventilated adult patient.

RT 141
Pulmonary Pathophysiology
2 Cr. Hrs. – 2 Contact Hrs.
Prereqs: RT 130A L&L, RT 131, RT 132, and RT 134
Coreqs: RT 144A and RT 152A CLI
This course examines the mechanism of pulmonary disease. Emphasis is placed on a detailed study of etiology, clinical manifestations, treatment, complications, and prognosis for most pulmonary disorders.

RT 144A
Adult Mechanical Ventilation
2 Cr. Hrs. – 3 Contact Hrs.
Prereqs: RT 134, RT 130A L&L, RT 132, and RT 131
Coreqs: RT 141 and RT 152A CLI
This course is a continuation of the Introduction to Mechanical Ventilation course. Emphasis will be placed on the evaluation, care and management of mechanically ventilated adult patients. Additional emphasis will be placed on the application, mechanical functions and operation of specific ventilator systems.

RT 152A CLI
Clinical IV
3 Cr. Hrs. – 8 Contact Hrs.
Prereqs: RT 130A L&L, RT 131, RT 132 and RT 134
Coreqs: RT 141 and RT 144A
This course is designed to allow the student to develop competency in the critical care areas, mastering skills in mechanical ventilation of adult patients.

RT 162A CLI
Clinical V
5 Cr. Hrs. – 16 Contact Hrs.
Prereqs: RT 141, RT 144A and RT 152A CLI
This course is designed to allow the student to further develop skills and competence in the adult critical care areas. Here the student will master ventilator therapy of the adult patient. By the end of the semester, the student should be able to assume a well-rounded position on the Respiratory care team.

RT 210
Cardiovascular and Renal Physiology
4 Cr. Hrs. – 4 Contact Hrs.
Prereq: RT 162A CLI
Coreq: RT 220C
This course is designed to present the anatomy, physiology and monitoring methods used to examine the heart-lung system and the kidneys. Emphasis will be placed on the electrocardiogram and hemodynamic monitoring, cardiac pharmacology, renal control of electrolytes and applications toward clinical respiratory care.

RT 212B
Advanced Clinical Practicum I
5 Cr. Hrs. – 16 Contact Hrs.
Prereqs: RT 210 and RT 220C
This clinical rotation is designed to prepare the student for an in-depth analysis of various critical care and diagnostic specialties.
SOC 101
Principles of Sociology
3 Cr. Hrs. – 3 Contact Hrs.
A course offering the student an opportunity to grasp the basic principles necessary to develop sociological insights. Societal structure, as well as the basic tools of sociological measurement are surveyed. Emphasis is on the United States from a global perspective. The course is designed to equip sociology majors with the necessary foundation to continue in sociology and to provide non-majors with a general understanding of the structure and processes of society.

SOC 102A
Race, Ethnicity, and Immigration
3 Cr. Hrs. – 3 Contact Hrs.
This course explores the related concepts of race, ethnicity, and immigration and their impact on the social conditions of diverse American communities. Students will learn how race relations shape politics, economics, housing, health, education, law, entertainment, and civil society. Students will learn about the conditions in which different peoples were incorporated into the American polity and how this incorporation affects people’s lives on the group and individual level.

SOC 202A
Modern Social Problems
3 Cr. Hrs. – 3 Contact Hrs.
This course surveys major obstacles faced by societies from a sociological perspective. Social problems rooted in fundamental inequalities are surveyed including: economic inequality, work, education, race and ethnicity, gender, crime, and the family. Social problems are defined, cause is analyzed, and solutions are critically evaluated.

RT 220C
Pediatric/Neonatal Critical Care
4 Cr. Hrs. – 6 Contact Hrs.
Prereq: RT 162A CLI
Coreq: RT 210
This course is designed to examine the various methods and procedures used to evaluate and care for the high-risk infant and pediatric patient. Emphasis will be placed on fetal development and monitoring, maternal risk factors, labor and delivery, newborn pathophysiology, mechanical ventilation and cardiopulmonary monitoring.

RT 222A
Clinical Rotation VII
3 Cr. Hrs. – 8 Contact Hrs.
Prereq: RT 212B
Coreqs: RT 230B and RT 240
This is the second and last clinical rotation taken by the second-year student. It is designed to expose the student to various specialties of respiratory care, including one day each in: home care; rehabilitative care; pulmonary function testing; sleep studies; smoking cessation; asthma education.

RT 220B
Pulmonary Diagnostics and Rehabilitation
2 Cr. Hrs. – 2 Contact Hrs.
Prereq: RT 212B
Coreqs: RT 222A and RT 240
This course explores the various methods of testing, evaluating and rehabilitating patients with pulmonary disease and disability. Emphasis will be placed on organization of rehabilitation programs, preventive care and home care.

RT 240
The Health Care Environment
1 Cr. Hr. – 1 Contact Hr.
Prereq: RT 212B
Coreqs: RT 222A and RT 230B
This course is designed to acquaint the student with the environments and forces that shape health care policy. Emphasis is placed on the social, political, medical and economic forces that influence the provision of health care today.
SOC 203
Introduction to Social Work
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: SOC 101 or SOC 202A
Designed to present the objectives, methods and practices of the current field of social work. Where possible and whenever possible fieldwork is included as part of the course offering. Field observation trips, presentations by practicing social workers, research practitioners and members of relevant social institutions and agencies will also be included. This course also assists those students majoring in education, ministry, medicine or law to gain intelligent awareness of the functions of existing social agencies in the Muskegon community.

SOC 205 Marriage and Family
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: SOC 101 with a minimum grade of “C”
Note: This course is offered only in even numbered years
Marriage and Family explores the sociological and ecological perspectives of intimate relationships and family dynamics of modern society; including changing traditions and family forms. With an emphasis on current research and demographics, topics studied in the course include: gender, sexuality, love, communication, conflict, singleness and cohabitation, parenting, divorce, and blended families.

Spanish

SPAN 090
Workplace Conversational Spanish I
3 Cr. Hrs. – 3 Contact Hrs.  
Prereq: None
This course offers an introduction to the Spanish language with particular emphasis on pronunciation, workplace greetings, farewells, courtesies, basic grammar principles, numbers, and cultural concepts as applicable to the workplace setting.

SPAN 101
Basic Spanish
4 Cr. Hrs. – 4 Contact Hrs.  
Note: Recommended English 101 with a minimum grade C prior to taking this course.
This course is for students with little or no experience with Spanish. It is designed to help the student achieve a minimal oral capability, to comprehend the structure of the language, and to develop moderate reading and writing skills. There is no laboratory requirement, but the student is required to meet with a native speaker, when available, for group conversation practice. There will be an emphasis placed on the value of culture.

SOC 206 Introduction to Aging
3 Cr. Hrs. – 3 Contact Hrs.  
An overview of gerontology that emphasizes identifying, describing and explaining challenges, patterns and processes concerning the elderly. This approach enables students and practitioners to acquire basic knowledge critical for careers related to gerontology, and to anticipate problems and promises of their own later lives.
SPAN 102
Basic Spanish
4 Cr. Hrs. – 4 Contact Hrs. FWSO
Spanish 102 assumes that the student has studied Spanish for at least one semester at the college level (preferably Spanish 101). The student continues to develop the capacity to read, write, speak and comprehend Spanish. The grammatical emphasis is on identifying and using the Present, Preterit, and Imperfect tenses along with other grammatical concepts. There is no laboratory requirement, but the student is required to meet with a native speaker, when available, for group conversation practice. There will be an emphasis placed on the value of culture.

SPAN 201
Intermediate Spanish
4 Cr. Hrs. – 4 Contact Hrs. FW
Prereq: SPAN-102 with minimum grade C or successful completion of three recent years of high school Spanish, and have instructor permission.
This course reviews and reinforces the material learned in the first two semesters, examines more tenses and other aspects of grammar, and provides practice in expanding capabilities in reading, writing, speaking and understanding Spanish. There is no laboratory requirement, but the student is required to meet with a native speaker, when available, for group conversation practice. There will be an emphasis placed on the value of culture.

SPAN 202
Intermediate Spanish
4 Cr. Hrs. – 4 Contact Hrs. W
Prereq: SPAN-201 with a grade of C” or better, or successful completion of four recent years of high school Spanish, and have instructor permission.
This course focuses on reviewing the tenses and grammatical concepts of the previous courses. The student will have more opportunities to develop skills in reading, writing, speaking and understanding Spanish. There is no laboratory requirement, but the student is required to meet with a native speaker, when available, for group conversation practice. There will be an emphasis placed on the value of culture.
Sports Officiating

OFC 111
Sports Officiating for Baseball, Basketball and Football
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: None
Sports Officiating will provide the student with the knowledge and expertise necessary to officiate in physical education classes, intramurals, and interscholastically. It includes the basic fundamental skills on officiating as well as the rules and mechanics of baseball, basketball and football. A MCC HPER physical release is required before the start of any activity.

OFC 112
Sports Officiating for Softball, Basketball and Volleyball
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: None
Sports Officiating will provide the student with the knowledge and expertise necessary to officiate in physical education classes, intramurals, and interscholastically. It includes the basic fundamental skills on officiating as well as the rules and mechanics of softball, basketball and volleyball. A MCC HPER physical release is required before the start of any activity.

Surgical Technology

ST 100
The Surgical Patient
2 Cr. Hrs. – 2 Contact Hrs.
Prereq: ST-103 Sterile Processing Externship (with minimum grade of C+).
Coreq: ST-110 Fundamentals of Surgical Technology (with minimum grade of C+)
This course will introduce the student to the surgical patient. Students will analyze the protocol and procedures directly affecting the care and safety of the surgical patient within the healthcare setting. This course will introduce students to the ethical, legal, and moral responsibilities of the surgical technologist, the concepts of patient care, and preoperative routines, along with elements of proper documentation and risk management. Students will be able to understand the psychosocial needs of the patient concept that can affect patient care in the Operating Room. In this course, students will discuss the death and dying process of surgical patients. The course will discuss concepts about diagnostic and assessment patient procedures and energy sources utilized in the Operating Room. Students will be able to understand the concepts of moving, handling, and positioning of the surgical patient, as well as surgical skin preparation and draping of the surgical patient. All skill techniques will be taught within this course and students will be required to perform skills in the ST 210 -Applied Surgical Techniques I and ST 211 - Applied Surgical Techniques II courses.

ST 101
Surgical Asepsis
2 Cr. Hrs. – 2 Contact Hrs.
Prereq: None
Coreq: ST-102 Sterile Processing I
This course defines and describes pathogenic microorganisms, the causes, and how to prevent infections and the spread within the hospital setting. This course will explain the most common pathogens that are found in the OR and some of the uncommon pathogens you may see. The student will be introduced to sterilization, disinfection, and other methods that are used to control microbial growth within the hospital and operating room settings.
ST 102
Sterile Processing I
5 Cr. Hrs. – 5 Contact Hrs. 
Prereq: None
Coreq: ST-101 Surgical Asepsis,
This course introduces individuals to basic skills needed in the Sterile Processing department of healthcare facilities. This course explains the principles and practices of decontamination, cleaning, disinfection, sterilization, and distribution of medical/surgical supplies. Students will demonstrate the knowledge of proper techniques in decontamination, assembly, sterilization, and storage practices per standards set within the discipline. At the end of the course, students will sit for the Certified Registered Central Service Technician exam through the Healthcare Sterile Processing Association.

ST 103
Sterile Processing Externship
3 Cr. Hrs. – 3 Contact Hrs. 
Prereq: ST-101 Surgical Asepsis, and ST-102 Sterile Processing I (with minimum grades of C+)
This course prepares students to function competently as an entry-level professional in the Central Service and Sterile Processing Department within healthcare. This course builds on the principles and practices taught in the ST-102 Sterile Processing I course and includes discussion of professional workplace skills, resume writing, and interviewing skills. The course provides students with on-the-job training and hands-on practice in a hospital setting in accordance with the Certified Registered Central Service Technician exam requirements established by the Healthcare Sterile Processing Association. Students are required to successfully complete the required 400 clinical hours before the conclusion of the course.

ST 110
Fundamentals of Surgical Technology
3 Cr. Hrs. – 3 Contact Hrs. 
Prereq: ST-103 Sterile Processing Externship (with minimum grade of C+)
Coreq: ST-100 The Surgical Patient
This course provides an introduction to the role and function of the surgical technologist as a member of the surgical team. This course will provide students with an understanding of what a surgical technologist is and how to be a professional within the field. Students will be able to analyze proper communication and teamwork within the healthcare setting. The course will introduce students to the healthcare facility structure and environment, environmental hazards, and disaster preparedness and response. Students will obtain knowledge to perform entry-level aseptic technique skills for the ability to work in an operating room setting including, but not limited to, sterile technique and surgical instrumentation. Students will be introduced to preoperative intraoperative and postoperative duties of the surgical technologist that are performed daily.

ST 115
Surgical Pharmacology
2 Cr. Hrs. – 2 Contact Hrs. 
Prereq: ST-110 Fundamentals of Surg Tech, ST-100 The Surgical Patient (must be completed with minimum grade of C+), Coreq: ST-150 Basic Operative Procedures, ST-200 Surgical Specialty/Professional Preparation, ST-210 Applied Surgical Techniques I, ST-211 Applied Surgical Techniques II
This course introduces the student to a wide variety of basic types of medications that are related to the care of the surgical patient. The student will have the understanding of basic types of anesthesia, anesthesia agents, indications and contraindications of medications, and the calculations of maximum dosages of various drugs. This course will discuss medication side effects, adverse effects, and usages within the operating room. This course will discuss emergency situations in the operating room and the roles of all OR team members.
ST 150  
Basic Operative Procedures  
2 Cr. Hrs. – 2 Contact Hrs.  
Prereq: ST-110 Fundamentals of Surg Tech, ST-100 The Surgical Patient (must be completed with minimum grade of C+).  
This course introduces the student to basic types of surgical procedures with a primary focus on the sequential steps involved in these procedures. Surgical anatomy, physiology, and pathophysiology will be addressed relative to basic surgical intervention throughout the course. Students will become familiar with instrumentation, anticipatory skills, surgical asepsis, and surgical conscience. The course will focus on the follow surgical specialties: minimally invasive surgery, robotics, general, 08/GYN, genitourinary, ophthalmic, ENT, and orthopedics.

ST 151  
Advanced Surgical Procedures  
6 Cr. Hrs. – 6 Contact Hrs.  
Prereq: ST-115 Surgical Pharmacology, ST-150 Basic Operative Procedures, ST-100 Surgical Specialty/Professional Preparation, ST-210 Applied Surgical Techniques I, ST-211 Applied Surgical Techniques II (must be completed with a minimum grade of C+)  
Coreq: ST-212 Applied Surgical Techniques III, ST-213 Applied Surgical Techniques IV  
This course introduces the student to intermediate and advanced surgical procedures including, but not limited to the following: oral and maxillofacial, plastic and reconstructive, vascular and microvascular, thoracic and pulmonary, cardiac, pediatric, neurosurgery, and emergency trauma. This course will primarily focus on the sequential steps involved in these procedures, specialized instrumentation and case-specific supplies that are needed for proper, optimal patient care. This course will address the surgical anatomy, physiology, and pathophysiology of specific surgical procedures.

ST 200  
Surgical Specialty/Professional Preparation  
2 Cr. Hrs. – 2 Contact Hrs.  
Prereq: ST-110 Fundamentals of Surgical Technology, ST-100 The Surgical Patient  
This course focuses on preparing students for lifelong learning. This course is designed to help prepare the student to produce a resume, cover letter, and interview skills to obtain an entry-level position in the healthcare setting as a surgical technologist. This course will also prepare students to sit for the National board of Surgical Technology and Surgical Assisting National Certification exam. Students will review program and clinical materials in the form of certification questions in order to prepare for the certification exam. Students are required to sit for the National CST Exam before the completion of the program.

ST 210  
Applied Surgical Techniques I  
2 Cr. Hrs. – 2 Contact Hrs.  
Prereq: ST-110 Fundamentals of Surgical Tech, ST-100 The Surgical Patient  
Coreq: ST-115 Surgical Pharmacology, ST-150 Basic Operative Procedures, ST-200 Surgical Specialty/ Professional Prep, ST-211, Applied Surgical Techniques II  
This course covers the application of aseptic technique theory. Student will be able to demonstrate their understanding on the sterile technique skills including, but not limited to: the use of surgical supplies and equipment, scrubbing, gowning and gloving, vital signs, opening up a sterile field, disinfection, and medical handwashing. Students will demonstrate knowledge of proper counting techniques, patient positioning, surgical skin prepping techniques, draping the sterile field. Students will be required to successfully complete a specified number of competencies to advance to ST-211 -Applied Surgical Techniques II.
ST 211
Applied Surgical Techniques II
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: ST-110 Fundamentals of Surgical Technology, ST-100 The Surgical Patient
This course is a continuation of Applied Surgical Techniques I and prepares students for actual operating room experience through application of theory and clinical skills in mock surgical procedures. Basic surgical procedures will be presented, with some hands-on experience utilizing surgical simulators, along with additional competencies pertaining to circulating duties and intraoperative duties of the surgical technologist. Students will be required to successfully complete course competencies including but not limited to the following: drawing medications, passing instrumentation and suture, passing ties, applying dressings, and correction of contamination. Students must successfully complete all competencies before admission to the clinical aspect of the program.

ST 212
Applied Surgical Techniques III
4 Cr. Hrs. – 4 Contact Hrs.
Prereq: ST-115 Surgical Pharmacology, ST-150 Basic Operative Procedures, ST-200 Surgical Specialty/Prof Prep, ST-210 Applied Surgical Techniques I, ST-211 Applied Surgical Techniques II (must be completed with a minimum grade of C+)
Coreq: ST-151 Advanced Surgical Procedures, ST-212 Applied Surgical Techniques II
In this course, students are assigned to clinical site hospitals and are provided with the opportunities to apply theory and clinical skills in the functioning operating room. Students are required to complete basic and advanced surgical procedures in a variety of specialty areas. Students are required to complete the 256 total clinical hours and a minimum of 120 total clinical cases by the conclusion of the course. During the course, students will document all clinical cases in which they participated in the following functions: first scrub, second scrub, and observation. All clinical cases performed during the course will continue to count towards the minimum total of 120 clinical cases required to be completed in compliance with AST Core Curriculum to qualify to sit for the NBSTSA CST exam.

ST 213
Applied Surgical Techniques IV
4 Cr. Hrs. – 4 Contact Hrs.
Prereq: ST-115 Surgical Pharmacology, ST-150 Basic Operative Procedures, ST-200 Surgical Specialty/Professional Prep, ST-210 Applied Surgical Techniques I, ST-211 Applied Surgical Techniques II (all courses must be completed with a minimum grade of C+)
Coreq: ST-151 Advanced Surgical Procedures, ST-212 Applied Surgical Techniques III
This course is a continuation of ST-212 Applied Surgical Techniques III. In this course, students are assigned to clinical site hospitals and are provided with the opportunities to apply theory and clinical skills in the functioning operating room. Students are required to complete basic and advanced surgical procedures in a variety of specialty areas. Students are required to complete the 256 total clinical hours and a minimum of 120 total clinical cases by the conclusion of the course. During the course, students will document all clinical cases in which they participated in the following functions: first scrub, second scrub, and observation. All clinical cases performed during the course will continue to count towards the minimum total of 120 clinical cases required to be completed in compliance with AST Core Curriculum to qualify to sit for the NBSTSA CST exam.
Technical Math

If you are planning to transfer to a four-year institution, consult with a counselor before signing up for a technical math class.

TMAT 101A
Technical Math I
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: None
A course for technical students who require a review of the principles of arithmetic as applied to manufacturing and business problems. Also included will be the use of the scientific calculator and basic algebra.

TMAT 102A
Technical Math II
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: TMAT 101A with a minimum grade of “C”
A course presenting the fundamentals of algebra, and geometry as applied to the technical and industrial field. Basic statistics will also be covered.

TMAT 201
Technical Math III
3 Cr. Hrs. – 3 Contact Hrs. FWO
Prereq: TMAT 102A with a minimum grade of “C”
A thorough study of basic trigonometry with applications to technical and industrial problems.
Technology

TECH 200
Applied Alternative and Renewable Energy
3 Cr. Hrs. – 3 Contact Hrs.
Prereq: None
This course introduces the student to the power generating technologies. It will cover the operating principles, benefits and challenges in traditional, alternative and renewable energy fields. An emphasis is made on fuel cells, wind power, photovoltaics, energy storage, and distribute power generation. An overview of the associated topics in economics and politics will be provided.

TECH 201A
Intro to Mechatronics
3 Cr. Hrs. – 5 Contact Hrs.
Prereq: ELTC 101A L&L
This course is designed as the capstone course for the Mechatronics Certificate. Students will apply engineering skills to design, build, and troubleshoot electro-mechanical systems. Course work will emphasize hands-on skills through project based learning approaches. Students will design mechanical assemblies using CAD software, fabricate their designs using 3-D printers, machining and wood working equipment, as well as integrate controls systems and programming micro-controllers.

TECH 290CI
Cooperative Internship
Variable 1-4 Cr. Hrs.
Prereq: None
Note: Student must have a GPA of 2.5 or better.
The student should have completed a significant portion of the core career requirements in their major field of study with a total of 30 credit hours towards a degree. Additionally, a faculty recommendation from the student’s major field of study is required. The Cooperative Internship Program is a paid or non-paid fieldwork experience in business and/or industry within the student’s major area of study. Variable credit hours (1-4 Cr. Hrs. per semester) may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired, however, the number of credit hours which can be applied towards a degree/certificate depends on the student’s course of study and departmental requirements. This course is offered as a pass/no pass grade. The internship course starting and ending dates are determined on an individual basis.
Theater

TH 101
Theater Appreciation
3 Cr. Hrs. – 3 Contact Hrs. ❁mışo
Designed for non-majors, this class attempts to prepare students for success as theatergoers. We will study the requirements of being an involved spectator at live theater and be introduced to the many elements of production. This is an experience-oriented course and requires attendance at play performances outside of class.

TH 102
Introduction to Acting I
3 Cr. Hrs. – 3 Contact Hrs. ❁
An introduction to the art and craft of acting for the stage. Focuses on character analysis and performance. Physical, vocal, and mental exercises are utilized to develop the individual’s self-awareness and communicative skills.

TH 108
Theater for Children
3 Cr. Hrs. – 3 Contact Hrs. ❁mış
A course exploring the specialized techniques of play production for or with children, creative dramatics, and theater games. The class is designed for persons working with children such as elementary schoolteachers, special education workers, recreation leaders, and religious education staff. The use of theatrical techniques as educational tools to enhance the learning experience in other subjects is explored.

TH 121
Introduction to Technical Theater
3 Cr. Hrs. – 3 Contact Hrs. ❁
This course presents an overview of the elements, processes, and traditions of theatrical design. The students will be introduced to the use of computer aided design and other tools in the design process used in most theaters today. The students will become familiar with tools used in the design process, begin developing their own personal design aesthetic, and develop an understanding of the evolution of the theatre design.

TH 122
Theater Set & Lighting Design
3 Cr. Hrs. – 3 Contact Hrs. ❁
In this course students will learn color theory, set and lighting design principles, and script analysis. Additionally they will learn basic computer aided design skills to be able to create scenic and lighting designs for theatrical productions.

TH 141
Applied Theater - Acting
1 Cr. Hr. – Variable Contact Hrs. ❁mişo
Prereq: Instructor permission
Practicum class earning credit for acting in a Center for Theater production. Scheduling is flexible but will include weekend performances and probably evening rehearsals.

TH 142
Applied Theater - Dance
1 Cr. Hr. – Variable Contact Hrs. ❁miş
Prereq: Instructor permission
Practicum class for performing in a Center for Theater production. Scheduling is flexible but will include weekend performances and probably evening rehearsals.

TH 144
Applied Theater - Costuming
1 Cr. Hr. – Variable Contact Hrs. ❁mişo
Prereq: Instructor permission
Practicum class earning credit for crew work on a Center for Theater play production. Scheduling is flexible but requires forty hours of lab work during available times.

TH 145
Applied Theater - Scenery Construction
1 Cr. Hr. – Variable Contact Hrs. ❁mişo
Prereq: Instructor permission
Practicum class earning credit for crew work on a Center for Theater play production. Scheduling is flexible but requires forty hours of lab work during available hours.
TH 147
Applied Theater - Production Crew
1 Cr. Hr. – Variable Contact Hrs.  
Prereq: Instructor permission
A 4-week practicum class earning credit for crew work on Center for Theater productions. Scheduling is flexible but requires forty hours of lab time in a four-week period. Work assignments are made in terms of student interest and production needs. Includes scenery construction, painting, properties, costume, lighting, and/or sound crews.

TH 148
Applied Theater - Performance Crew
1 Cr. Hr. – Variable Contact Hrs.  
Prereq: Instructor permission
A 2-week practicum class earning credit for crew work on Center for Theater productions. Requires attendance at weekend and evening rehearsals and performances for a two-week period. Work assignments will be made in terms of student interest and production needs. Includes scenery shifting, properties, costume running, and lighting, and/or sound crews.

TH 160
Acting for TV and Film
3 Cr. Hrs. – 3 Contact Hrs.  
This course is designed to prepare the student with the basic skills necessary for TV and/or film acting. Among the topics covered are: acting for the camera, the use of and differences between the television and film camera, the use of the storyboard, shooting out of sequence, developing continuity, and the use of lighting, sound, special effects and editing. Rehearsal outside of class time and shooting on location may be required. The final class project will culminate in each student acting in a prepared film scene.

TH 201
Introduction to Theater History
3 Cr. Hrs. – 3 Contact Hrs.  
An introductory course designed to give the student an awareness of the development of theater from classical Greece through Neo-classical France.

TH 202
Introduction to Acting II
3 Cr. Hrs. – 3 Contact Hrs.  
An acting class emphasizing the analysis of scripted scenes and character interactions. Selected scenes are rehearsed for possible performance at the end of the semester.

TH 203
Readers Theater
3 Cr. Hrs. – 3 Contact Hrs.  
This performance course is designed to give the student knowledge of and experience in oral reading as a theatrical form. Out-of-class rehearsal and performance time may be required.

TH 204
Improvisation for Actors
3 Cr. Hrs. – 3 Contact Hrs.  
This course uses the art of improvisation as a tool for enhancing creativity, responsiveness, and immediacy for the actor; offering a way to explore the student’s innate ability to be playful and creative. This class studies the fundamentals of improvisation, focusing on exercises and games that build confidence and improve listening, intuitive, and collaborative skills. In this course the student learns the basics rules, games, and forms of improvisation and their relation to scripted and non-scripted rehearsal and performance work.

TH 212
Summer Theater Workshop
3 Cr. Hrs. – Variable Contact Hrs.  
A practicum course allowing advanced students to undertake special projects in conjunction with a summer theater company. Projects are usually creative in nature and are undertaken with the advice and supervision of an approved mentor. Although focusing on the specialized crafts of acting, directing, design, technical production, or arts management, project implementation will emphasize the cooperative nature of theater.
COURSE DESCRIPTIONS

TH 217
Creative Dramatics
1 Cr. Hr. – 1 Contact Hr.
This course is an introduction to the use of creative
dramatics in the classroom, home, and community.
The goals and concerns of creative drama will
be explored as well as methods for incorporating
these techniques into a curriculum. Focus will be
centered on the activities that are the basis of every
creative dramatics program. A particular interest
will be centered on the novice who needs practical
advice on how to begin teaching creative thinking
and problem solving.

Welding Technology

W 101A
Basic Welding
3 Cr. Hrs. – 5 Contact Hrs.
Prereq: None
Basic Welding is designed for the learner who
has no welding experience or limited welding
experience. Subject material will focus on the
theory of welding processes common to local
industries. The welding and cutting processes
covered will be: Oxyacetylene Welding (OAW),
Oxyacetylene Cutting (OAC), Plasma Arc Cutting
(PAC), heating and bending with the torch,
Shielded Metal Arc Welding (SMAW), and Gas
Metal Arc Welding (GMAW). Students will learn
to set-up and operate welding equipment according
to approved standards. Theory of each welding
process will be covered in the classroom followed
by practical experience in the lab. Lab projects will
provide experiences in the fabrication of typical
weld joints, and are based on relevant sections of
the American Welding Society (AWS) SENSE
Level 1 standard.

W 102A
Gas Metal Arc Welding (GMAW)
3 Cr. Hrs. – 6 Contact Hrs.
Prereq: W 101A with a minimum grade of “C,” class
must be taken “previous” or “concurrent”
The GMAW (MIG) course is an in-depth study of
the common methods of welding used in industry. Extensive practice on metals including:
mild steel, stainless steel, and aluminum in all
welding positions will be covered. Students
will be expected to pass the written knowledge
assessments from the American Welding Society
(AWS) SENSE Level 1 program as well as perform
the skill practices.

W 103A
Gas Tungsten Arc Welding (TIG)
3 Cr. Hrs. – 6 Contact Hrs.
Prereq: W 101
The GTAW (TIG) course is an in-depth study
of the common methods of welding used in
industry. Extensive practice on metals including:
mild steel, stainless steel, and aluminum in all
welding positions will be covered. Students
will be expected to pass the written knowledge
assessments from the American Welding Society
(AWS) SENSE Level 1 program as well as
perform the skill practices.

W 105
Shielded Metal Arc Welding (STICK)
3 Cr. Hrs. – 6 Contact Hrs.
Prereq: W 101
The SMAW (Stick) course is an in-depth study of
the welding process theory, skills and techniques
that are common to the welding industry.
Extensive technique practice for skill in all
positions on both fillet and groove welding joints
on carbon steel will be covered. Performance
based testing for welder qualification for students
in the welding major will be required. Students
will also be expected to pass the written knowledge
assessments from the American Welding Society
(AWS) SENSE Level 1 program.
W 201
Structural Welding
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: W 105
A course designed for advanced welders who want to improve their skills in stick welding or who are preparing for certification in AWS D1.1 Structural Welding Code. This code is used for welding on bridges, buildings, steel structures, road machinery, farm equipment and other structures. Materials presented will be the AWS code book, safety precautions, joint preparation, electrode selection, setting up equipment and welding procedures. Lab projects for this course are designed to align with relevant sections of AWS SENSE Levels I and II. Lab work will include out-of-position welding using the fast fill/fast freeze (E6010) and fast fill/slow freeze (E7018) category electrodes. Weld testing, both visually and mechanically, will be an integral part of the coursework.

W 202A
Pipe Welding
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: W 201
This course is designed for the advanced welders who want to improve their pipe welding skills or are preparing for pipe welding certification to the AWS D1.1 welding code standard. Lab projects for this course are designed to align with relevant sections of AWS SENSE Levels I. Topics covered will include: safety practices, tack welds, positioning and pipe welding using methods most frequently found in industrial processes and fieldwork. All common welding positions will be covered. Students are required to perform root pass, filler pass and cover pass on each specimen. Welding processes which will be covered are: Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW). Destructive and visual testing will be part of the coursework.

W 206
Metal Fabrication
3 Cr. Hrs. – 6 Contact Hrs.  
Prereq: W 102A, W 103A, W 105
This course deals with the theory, skills and application of metal fabrication principles. Students will apply their welding skills to build a capstone project. Students will be required to select and design an approved project. Building a bill of materials, ordering the materials, assembly, following tolerances, layout, fit-up and heat distortion control will all be factors in this course. Use of the various fabrication equipment in the welding lab. The capstone project will be approved on the basis of need and application. *Examples to include a community project or repair project.
Women’s Gender Studies

WGS 101
Introduction to Women’s and Gender Studies
3 Cr. Hrs. – 3 Contact Hrs.
WGS students study women’s diverse experiences, perspectives and contributions as well as gender identity and gender representation as central categories of analysis. Interdisciplinary in range of course content, WGS 101 examines cultural beliefs and stereotyped images of women and gender, and covers the following: gender-role socialization, sexuality, the history of the women’s liberation movements, different perspectives in feminism, and representations of women and their efforts to define new identities through work, creative activity, education and feminism. Through films, readings, and focused studies of the consequences of gender experience in life and learning. WGS 101 explores research about gender in personal development and relationships, race/ethnicity, class, and sexuality. Course goals: raise awareness, make connections, read, write and think critically, and apply course knowledge and issues to personal experiences.

WGS 201
LGBTQ Studies
3 Cr. Hrs. – 3 Contact Hrs.
An inquiry into a wide range of issues related to the lesbian, gay, bisexual, trans-gender, and queer community. The course will include an overview of the history, politics, literature, and morality of sexual orientation and gender identity and of the LGBTQ civil rights movement and important members of the LGBTQ community. Gender identity will be explored from several viewpoints and sub-cultural perspectives as will cultural and media expressions and reactions. Finally, intersectionalities with race, social class, gender, and sex will be critically examined.
General Academic Policies

Class Standing
For the purposes of records and reporting, students are classified as freshmen if they have completed 25 credit hours or less, sophomores if they have completed 26 credit hours or more.

Graduation Credential Requirements
To receive an associate degree, diploma, or certificate at Muskegon Community College, a student must meet the following requirements:

A. All candidates must maintain a cumulative 2.0 grade point average. Health programs may have a different GPA requirement.
B. A minimum Muskegon Community College credit requirement (Residency Requirement).
   1. Associate Degrees - A student must complete not less than 30 credit hours or the last 15 credit hours at Muskegon Community College in order to receive an associate degree.
   2. Diplomas - A student must complete 26 credit hours at Muskegon Community College in order to receive a diploma.
   3. Certificates - A student must complete 6 credit hours at Muskegon Community College in order to receive a certificate.
C. Students returning to Muskegon Community College after a three (3) year absence or longer will be under the requirements of the current catalog.

Any exceptions to these graduation requirements must be brought before the Petitions Committee with the full concurrence of the department(s) involved.

Associate in Science and Arts Degree Requirements
The Associate in Science and Arts (ASA) Degree is primarily a transfer-oriented degree. In order to receive the degree, each student must complete a minimum of 62 credit hours of course work and meet all of the program requirements as listed in the Muskegon Community College catalog.

Associate in Applied Science Degree Requirements
The Associate in Applied Science (AAS) Degree is awarded for successful completion of an occupationally oriented curriculum. It may also be used as a transfer degree to certain baccalaureate programs. Please note, developmental credits can not be used toward graduation.

Candidates for this degree must complete a minimum of 62 credit hours of course work and all course requirements for a specific associate in applied science program as outlined in the Muskegon Community College catalog.

Graduation requirements for the associate degree may include two credits in physical education. Refer to program pages for specific courses which will fulfill graduation requirements.

The maximum number of cooperative internship credit hours that may be applied toward an associate degree is 12 and many programs permit even fewer.

Program Evaluation (Degree Audit)
My Progress is a tool in Student Planning that shows the requirements for students’ academic program as outlined in the catalog for the year they were admitted and their progress toward completing those requirements. The audit shows both the courses transferred in from other institutions and courses completed at Muskegon Community College. It includes their grades and GPA.

Under My Progress in Student Planning, students may select “view a new program” to compare their academic record/progress to any program they might indicate, without changing their academic program. This can be a very helpful tool for students considering a change of program, but does not know how their record might apply to the requirements of the new program.

Students are encouraged to review My Progress in Student Planning by logging into MyMCC. My Progress is the primary tool used during counseling/advising and in preparing for graduation.
Application for Graduation

To graduate from Muskegon Community College with a degree or a certificate, you begin the process by completing an Application for Graduation online in Student Planning. You must have completed at least 47 credit hours if you are applying for an associates degree. The application deadline dates are as follows:

- Fall Semester Graduation: November 1
- Winter Semester Graduation: March 1
- Summer Semester Graduation: June 1

The graduation audit will be based on the requirements in effect at the time of the student’s initial enrollment, unless updated catalog requirements are specifically requested. (Students may not apply for graduation under requirements that were printed for a year they were not in attendance at the College.) Students returning to Muskegon Community College after an absence of THREE YEARS OR LONGER will be under the requirements of the current catalog.

When your Application for Graduation is complete, a review of your academic record will be conducted by the Office of the Registrar to determine if graduation requirements have been met. You will be notified through MCC email.

Students are not eligible for graduation until all delinquent tuition, fees, and fines have been paid. The student is responsible for meeting all graduation requirements.

Multiple Degrees

You may earn and be awarded two or more degrees (and/or certificates), provided that all academic requirements for the degrees have been met. A graduation audit will be conducted for each degree requested. Multiple diplomas or certificates will be awarded when appropriate.

President’s List - The names of those students who have completed 12 credit hours with a 4.0 grade point average in any semester are published by the College, subject to permission of the student. Those so recognized are designated as President’s List Students.

Dean’s List - The names of those students who have completed 12 credit hours with a 3.5 grade point average or higher in any semester are published by the College, subject to permission of the student. Those so recognized are designated as Dean’s List Students.

Academic Honors List - The names of those students who have completed at least 6 credit hours and fewer than 12 credit hours with a 3.5 grade point average or higher in any semester are published by the College, subject to permission of the student. Those so recognized are designated as Academic Honors List Students.

Academic Forgiveness (Re-evaluation of Grades for An Entire Semester)

The College permits students within specific and defined guidelines to petition for Academic Forgiveness for an entire semester by submitting a “Performance Agreement” form. You must see a counselor to discuss and initiate the agreement.

Students granted academic forgiveness will have their cumulative grade point averages recalculated. While the forgiven grades will continue to appear on the official transcript, they will be noted on the transcript as forgiven.

Repeated Courses

The Muskegon Community College Course Repeat Rule was developed to provide fair access to classes. It allows the student to repeat the course once. Instructor permission is required to take a course more than twice.

To repeat a course, a student must register for and pay all necessary fees. Each grade received will appear on a student’s record, but only the last grade awarded is used in computing a GPA. Keep in mind that if you retake a class and receive a lower grade, the last grade is still the one that counts. When transferring to another college or university, you may be held accountable for all attempts and grades associated with a course taken at Muskegon Community College.
Substitution Waiver
A substitution waiver is the substitution of a required course in a degree or certificate with an alternate course. Substitution waivers do not reduce the total number of credit hours required in a degree or certificate or in general education requirements. Course substitution waivers are granted for a specific degree or certificate and a specific catalog year. The granted substitution waiver will not automatically apply toward other degrees and certificates you are pursuing.

You may request a substitution waiver by contacting an academic counselor.

Grading System
Final grades are posted on your academic record and can be found through the MyMCC under your Planning & Registration, Student Planning & Registration, click on the Academics tab, and then choose Grades.

Quantitative Grade Values

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>0.7</td>
</tr>
<tr>
<td>E</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Non-quantitative Grades (not computed)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Pass</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
</tr>
<tr>
<td>WI</td>
<td>Withdrawal—Illness</td>
</tr>
<tr>
<td>WM</td>
<td>Withdrawal—Military Activated</td>
</tr>
<tr>
<td>CS</td>
<td>Community Service</td>
</tr>
<tr>
<td>AU</td>
<td>Audit</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
</tbody>
</table>

Pass/No Pass - These grades are not optional but a standard grading system for particular courses.

“Incomplete” Policy - When you are unable to complete all of the required work for a course because of illness or other unpredictable circumstances, you may request an Incomplete (I) grade. When requested by the student, the instructor’s judgment will determine whether the incomplete grade will be assigned. If the instructor does not deem the circumstances to be appropriate for an Incomplete (I), you may elect to withdraw from the course according to the withdrawal policy.

Although shorter time periods may be assigned on a case-by-case basis, “I” grades must be completed within one year of the official occurrence of the grade.

Once you complete the necessary requirements for the class, a Change of Grade Form must be submitted for you by the instructor to receive a grade greater than an “E.” Any “I” (incomplete) grades that are not changed within one year of the official occurrence of the grade will default to an “E.”

Grade Point Average (GPA) - Each letter grade has a point value as indicated above. The number of grade points earned for each course is found by multiplying the credit value of the course by the point value of the final grade. For example, a student with a final grade of “B” in Political Science (PSCI) 111 would earn 12 grade points, since a “B” has a point value of 3, and Political Science 111 is a 4-credit course.

The semester grade point average is calculated by adding the total points for all courses and dividing by the total number of credit hours taken during the semester.

Example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>3</td>
<td>A</td>
<td>12</td>
</tr>
<tr>
<td>PSCI 111</td>
<td>4</td>
<td>C</td>
<td>8</td>
</tr>
<tr>
<td>PHSC 101A</td>
<td>4</td>
<td>B</td>
<td>12</td>
</tr>
<tr>
<td>ART 198</td>
<td>3</td>
<td>D</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>

35 Grade Points divided by 14 Credits equals 2.50
Grade Point Average (GPA)  
(35 ÷ 14 = 2.50)

The cumulative grade point average is found by dividing the total of all points earned in all semesters by all credits taken to date.

Academic Load - Students are not permitted to enroll for more than 18 credit hours without the approval of a counselor.
Academic Probation

Academic Probation:
Students are placed on Academic Probation when they have completed at least 12 credit hours at MCC and have failed to meet the minimum cumulative grade point average (G.P.A.) of 2.0. Students will be notified of probation status by email. An academic probation hold will be placed on their record which will prevent them from registering for future courses or dropping current courses. To have the hold lifted, students are required to meet with a Counselor to discuss how to improve the G.P.A. by using College resources.

Registration Information

Registration at Muskegon Community College takes place three times a year, starting in April for the fall semester, November for the winter semester, and March for the summer session. The fall and winter semesters are 15 weeks in length and the summer session is 12 weeks in length. The summer session generally begins in May and is offered with a variety of start and ending dates. Register as soon as you are eligible to help ensure your place in the classes you desire.

To ensure you are eligible to register, make sure you have:

- Been admitted or readmitted to Muskegon Community College
- Cleared all financial holds
- Completed all placement tests or submitted appropriate ACT, SAT or MME scores.
- Have completed all course prerequisites
- Completed new student orientation

A. Testing. Before registering for classes, send any previous placement exam scores to Muskegon Community College, such as ACT, SAT, Accuplacer, etc. These scores may be used by a Counselor to help place you into the courses that are most appropriate for your current level of knowledge. Please consult a counselor for more information.

B. Counseling. Schedule an appointment to see a counselor early. The counselor can assist you in curricular planning and with other concerns you may have.

Priority Registration

Priority Registration is available exclusively to currently enrolled students. Using the MyMCC, current students have the first opportunity to select courses before registration is open to other individuals. Registration is based on a priority system that allows you to begin registration according to the number of total MCC credit hours completed. Priority begins with students who have earned the most MCC credit hours and ends with the students with the least MCC credit hours. A few weeks before priority registration begins, students will be emailed with their priority registration start times. You may register starting at your assigned time or after, but not before.

Online Registration

To register for classes online:

Step-by-Step instructions for registering for classes online in Self-Service/Student Planning are available online at www.muskegoncc.edu/registration. For additional assistance with online registration, email registration@muskegoncc.edu or call (231) 777-0211.

Adding Courses

Prior to the beginning of the semester, you may add courses from the start of the registration period up to the day the class begins. A student must have written permission of the instructor to add a class once it has met. Regarding online classes, a student must have written permission of instructor.

Academic Dismissal:

Students placed on academic probation for two consecutive semesters MAY be dismissed from MCC for one semester. Any student who is dismissed from MCC may appeal to the Petitions Committee for reinstatement.
Prerequisite: A prerequisite is a requirement that must be successfully completed before a student may enroll in a course. Prerequisites are based on the essential skills or competencies to be successful in the next level course.

Co-requisite: A co-requisite is a course that is either recommended or required to be taken in combination with another course.

Wait Lists
Once a course has reached the maximum enrollment, students are given the option to be placed on a wait list. This option must be chosen at the time of registration. The wait listed course cannot conflict with other courses in the student’s registration schedule and cannot be placed on multiple sections of the same course. Being on a wait list does not mean the student is registered in the course. Once space becomes available in a class, wait listed students will be offered a position in the class based on the student’s position on the wait list.

If you wish to attend a class, but do not desire credit or a grade, you may elect to audit a class. If you audit a class, you are required to pay the same tuition and fees as those taking courses for credit.

MCC permits students to register for college credit courses on a non-credit (audit) basis. Those who wish to do so should consult with a member of the counseling staff regarding College policies and procedures for audit status enrollment.
Audit Policy

These policies include the following:

1. Students may audit courses so long as they (a) register specifically for audit status; (b) pay regular tuition and fees as listed in the official publications of the College; and (c) comply with all assignments, projects, tests, and learning experiences required of credit-status (regular status) students unless they explicitly make another arrangement that is mutually agreeable to both instructor and student.

2. Audit status students should realize that unless they complete all regular course requirements it will probably not be possible to convert from audit status to credit status at a later date. Audit status students who have completed all regular course requirements to date and wish to change from audit status to credit status must complete a Request to Change from Audit to Credit Form and submit it to Room 1048J. Such petitions must include a note from the instructor stating the student has completed all regular course requirements to date. **This request must be processed prior to the final examination.**

3. Students who register for a credit class cannot change to audit status.

4. For students who complete all requirements, instructors will record the progress of audit students in the same manner as credit students. A grade of “AU” will be recorded on the audit status student’s transcript at the end of the semester, and will not be used to compute grade point averages. **Please also note that audit credit cannot be used to complete a degree or transferred to another institution.**

Credit Hour

As a rule of thumb, each credit hour equals one hour of class or two hours of laboratory work per week. Exceptions are noted in course descriptions.

Employment and Classload

Many students find it necessary or even desirable to be employed while attending college. Although enrollment on a full-time basis is very demanding, you may find that you can maintain satisfactory grades even while working part-time. The following table provides general guidelines for those students who plan to work:

<table>
<thead>
<tr>
<th>Classload/Workload</th>
<th>Credit Hrs. per Semester</th>
<th>Extracurricular Hrs. per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 or more</td>
<td>.................................................. 15 or less</td>
<td></td>
</tr>
<tr>
<td>10 - 12</td>
<td>.................................................. 24 or less</td>
<td></td>
</tr>
<tr>
<td>7 – 9</td>
<td>.................................................. 32 or less</td>
<td></td>
</tr>
<tr>
<td>3 – 6</td>
<td>.................................................. 40 or less</td>
<td></td>
</tr>
</tbody>
</table>

If you stop attending a course and do not formally withdraw, the instructor has the option of initiating a grade of “W” or a grade of “E”.

Attendance

You are expected to attend all sessions of the classes in which you enrolled. You may be withdrawn from the class at the discretion of the instructor if you have excessive absences. Instructors who do not take attendance into account when determining your status in the course must maintain other consistent means of showing participation.
Drop/Withdrawal Policy

Withdrawal from College
Withdrawal from college is defined as the student’s formal withdrawal from all courses currently in progress.

Military Withdrawal
Any currently enrolled student who is called for military duty shall be dropped from all uncompleted courses with a grade of “WM” - Withdrawal Military and will be granted a refund of all tuition and fees paid upon receipt of a copy of military orders, completed Tuition Refund Appeal to the Student Welcome Center and deliberations of the Petitions Committee.

Illness Withdrawal
The Petitions Committee may allow a “WI” if a qualified professional (doctor, psychologist, etc.) provides written evidence of physical or mental illness. The initiative for such action rests with you, the student, and should be initiated in the semester in which it occurs, except under extenuating circumstances. All Withdrawal Illness requests must be received no later than one semester from the last date of the semester being appealed. A completed Tuition Refund Appeal form with proper documentation must be turned into the Student Welcome Center for review by the Petitions Committee.

Dropping A Course During The Refund Period
You may drop courses during the listed 100% refund period using The MyMCC or by submitting a Add/Drop form at the Student Welcome Center and no grades will be recorded on your transcript.

Withdrawing From A Course After The Refund Period Is Over
You may process withdrawals on The MyMCC or by submitting a Add/Drop form to the Student Welcome Center. You are strongly encouraged to consult with your instructor and a counselor prior to processing a withdrawal. If you have financial aid or scholarships, it is especially important for you to contact the Financial Aid Office prior to withdrawing.

You may withdraw from a course after the drop/ refund period until the Friday before final exams begin. For early-ending courses, you may withdraw from a course after the refund period until one day prior to the end date of the course (prior to the final examination). Withdrawal from a course will generate a grade of “W” on your academic record and tuition/ fees are not refunded.
Tuition, Fees and Payment

Costs to attend MCC include registration fees, tuition, special class fees, and books/supplies. Please refer to MyMCC for current tuition and fee information. Books and supplies may be purchased in the Bookstore located on campus.

To Determine Your Tuition and Fees
Locate the total number of contact hours you have selected to determine your tuition and technology fee. Add the contact hour tuition, technology fee, course fee (if applicable) and the registration fee.

Example:
Nine (9) Contact hours as an in-district resident
Tuition .................................................................$1125.00
Technology Fee ......................................................$234.00
Infrastructure Fee ..................................................$139.50
Registration Fee ...................................................$35.00
Lab/Course Fee (if applicable) .........................n/a
Total Payment Due ...............................................$1,533.50

Technology Fee: $26.00 per contact hour
Infrastructure Fee: $15.50 per contact hour
Registration Fee: A $35 refundable registration fee will be assessed each semester to all students when registering for classes.

* Some Courses Require Additional Fees

Paying Tuition
Tuition may be mailed in, paid online through MyMCC using a credit card, or paid at the Student Welcome Center. If you have financial aid approved, make sure there is enough to cover your tuition and fees. Tuition due dates are posted on MyMCC.

Payment Plan
To help meet your educational expenses, Muskegon Community College has partnered with Nelnet Business Solutions (NBS) to provide MCC students with payment plan options to pay for tuition. Students who choose to use a payment plan may select installment plans that are spread over several months, depending on the length of the semester. Payments may be made from checking or savings accounts or by Visa, MasterCard, American Express, or Discover credit cards. In addition to the variety of choices available, students also have the convenience of paying online as soon as they are registered. The payment is automatically deducted each month on the date you select. Please note: Check, Debit, and ATM Cards may be returned unpaid due to daily limits restrictions imposed by your bank.

The only cost to budget monthly payments through a payment plan is a $25 per semester non-refundable enrollment fee and a 2.75% non-refundable service fee if you choose to make your payments by credit/debit card. If you select the ACH option to have your payments come from a checking or savings account, there is no service fee, only the $25 enrollment fee. If you wish to pay in full with E-Check instead of paying by credit card, there is only a $2 fee.

If your payment is not successful, it will be reattempted within 15 days of the first attempt. Any time a payment is returned, you will receive notification from NBS on how the returned payment will be handled. Your payment plan agreement will be processed until the balance owed is paid in full.

For each returned payment, NBS assesses a $30 Returned Payment Fee. NBS Returned Payment Fees are automatically deducted from the account you have provided. If your NBS Returned Payment Fee is returned, it will be reattempted. NBS Returned Payment Fees are payable to NBS.

NBS Enrollment Fees and Returned Payment Fees are subject to change in future academic years or semesters, unless otherwise agreed by NBS and Muskegon Community College. Interest earned on all custodial funds held by NBS is payable to NBS.
### Tuition and Contact Hour Charge Rates

Tuition rates and fees are subject to change; please refer to the MyMCC Portal for current rates and fees. The rates in the following table were effective for Fall Semester 2022:

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>In District</th>
<th>Out-of-District</th>
<th>Out-of-State</th>
<th>Technology Fee</th>
<th>Infrastructure Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>$62.50</td>
<td>$117.00</td>
<td>$163.50</td>
<td>$13.00</td>
<td>$7.75</td>
</tr>
<tr>
<td>1.0</td>
<td>$125.00</td>
<td>$234.00</td>
<td>$327.00</td>
<td>$26.00</td>
<td>$15.50</td>
</tr>
<tr>
<td>2.0</td>
<td>$250.00</td>
<td>$468.00</td>
<td>$654.00</td>
<td>$52.00</td>
<td>$31.00</td>
</tr>
<tr>
<td>3.0</td>
<td>$375.00</td>
<td>$702.00</td>
<td>$981.00</td>
<td>$78.00</td>
<td>$46.50</td>
</tr>
<tr>
<td>4.0</td>
<td>$500.00</td>
<td>$936.00</td>
<td>$1,308.00</td>
<td>$104.00</td>
<td>$62.00</td>
</tr>
<tr>
<td>5.0</td>
<td>$625.00</td>
<td>$1,170.00</td>
<td>$1,635.00</td>
<td>$130.00</td>
<td>$77.50</td>
</tr>
<tr>
<td>6.0</td>
<td>$750.00</td>
<td>$1,404.00</td>
<td>$1,962.00</td>
<td>$156.00</td>
<td>$93.00</td>
</tr>
<tr>
<td>7.0</td>
<td>$875.00</td>
<td>$1,638.00</td>
<td>$2,289.00</td>
<td>$182.00</td>
<td>$108.50</td>
</tr>
<tr>
<td>8.0</td>
<td>$1,000.00</td>
<td>$1,872.00</td>
<td>$2,616.00</td>
<td>$208.00</td>
<td>$124.00</td>
</tr>
<tr>
<td>9.0</td>
<td>$1,125.00</td>
<td>$2,106.00</td>
<td>$2,943.00</td>
<td>$234.00</td>
<td>$139.50</td>
</tr>
<tr>
<td>10.0</td>
<td>$1,250.00</td>
<td>$2,340.00</td>
<td>$3,270.00</td>
<td>$260.00</td>
<td>$155.00</td>
</tr>
<tr>
<td>11.0</td>
<td>$1,375.00</td>
<td>$2,574.00</td>
<td>$3,597.00</td>
<td>$286.00</td>
<td>$170.50</td>
</tr>
<tr>
<td>12.0</td>
<td>$1,500.00</td>
<td>$2,808.00</td>
<td>$3,924.00</td>
<td>$312.00</td>
<td>$186.00</td>
</tr>
<tr>
<td>13.0</td>
<td>$1,625.00</td>
<td>$3,042.00</td>
<td>$4,251.00</td>
<td>$338.00</td>
<td>$201.50</td>
</tr>
<tr>
<td>14.0</td>
<td>$1,750.00</td>
<td>$3,276.00</td>
<td>$4,578.00</td>
<td>$364.00</td>
<td>$217.00</td>
</tr>
<tr>
<td>15.0</td>
<td>$1,875.00</td>
<td>$3,510.00</td>
<td>$4,905.00</td>
<td>$390.00</td>
<td>$232.50</td>
</tr>
<tr>
<td>16.0</td>
<td>$2,000.00</td>
<td>$3,744.00</td>
<td>$5,232.00</td>
<td>$416.00</td>
<td>$248.00</td>
</tr>
<tr>
<td>17.0</td>
<td>$2,125.00</td>
<td>$3,978.00</td>
<td>$5,559.00</td>
<td>$442.00</td>
<td>$263.50</td>
</tr>
<tr>
<td>18.0</td>
<td>$2,250.00</td>
<td>$4,212.00</td>
<td>$5,886.00</td>
<td>$468.00</td>
<td>$279.00</td>
</tr>
<tr>
<td>19.0</td>
<td>$2,375.00</td>
<td>$4,446.00</td>
<td>$6,213.00</td>
<td>$494.00</td>
<td>$294.50</td>
</tr>
<tr>
<td>20.0</td>
<td>$2,500.00</td>
<td>$4,680.00</td>
<td>$6,540.00</td>
<td>$520.00</td>
<td>$310.00</td>
</tr>
</tbody>
</table>
Refund Policy

(Subject to change—refer to MyMCC)

Muskegon Community College believes that students should be allowed to attend at least one class meeting without penalty. During that class meeting you can review the detailed requirements of the course syllabus and estimate the workload required. This should enable you to make an informed judgment about the course and increase your probability of success.

Refunds will first be applied to any outstanding debts owed to the College by the student; the balance will be sent in an electronic disbursement through the student’s “My MCC OneCard” no later than 10 business days after the award date (typically Census date) or loan disbursement. For more information on the “My MCC OneCard” visit www.mymcconecard.com.

Schedule of Refund Days

Fall and Winter Semesters:

<table>
<thead>
<tr>
<th>Class Length (in weeks)</th>
<th>Number of Business Days to Drop a Class for Tuition Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Weeks</td>
<td>10 days from the start date of the Semester</td>
</tr>
<tr>
<td>13-14 Weeks</td>
<td>7 days from the start date of the class</td>
</tr>
<tr>
<td>11-12 Weeks</td>
<td>6 days from the start date of the class</td>
</tr>
<tr>
<td>9-10 Weeks</td>
<td>5 days from the start date of the class</td>
</tr>
<tr>
<td>7-8 Weeks</td>
<td>4 days from the start date of the class</td>
</tr>
<tr>
<td>5-6 Weeks</td>
<td>3 days from the start date of the class</td>
</tr>
<tr>
<td>3-4 Weeks</td>
<td>2 days from the start date of the class</td>
</tr>
<tr>
<td>1-2 Weeks</td>
<td>1st day of the class</td>
</tr>
</tbody>
</table>

Summer Semester:

<table>
<thead>
<tr>
<th>Class Length (in weeks)</th>
<th>Number of Business Days to Drop a Class for Tuition Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Weeks</td>
<td>10 days from the start date of the Semester</td>
</tr>
<tr>
<td>11 Weeks</td>
<td>6 days from the start date of the class</td>
</tr>
<tr>
<td>9-10 Weeks</td>
<td>5 days from the start date of the class</td>
</tr>
<tr>
<td>7-8 Weeks</td>
<td>4 days from the start date of the class</td>
</tr>
<tr>
<td>5-6 Weeks</td>
<td>3 days from the start date of the class</td>
</tr>
<tr>
<td>3-4 Weeks</td>
<td>2 days from the start date of the class</td>
</tr>
<tr>
<td>1-2 Weeks</td>
<td>1st day of the class</td>
</tr>
</tbody>
</table>
By accepting the financial assistance offered to me by Muskegon Community College, I agree to and accept responsibility for the following conditions:

A. I will use the financial aid awarded to me only for my educational expenses at Muskegon Community College, including tuition and fees, books and supplies, transportation, room and board, dependent child care, and other similar costs of attendance.

B. If my financial aid awards are based on full time enrollment, the amount credited to my account may be reduced to reflect actual enrollment status. Federal and state financial aid is based on credit hours, not on contact hours. Your actual award will be determined no earlier than 1) at the semester census date (end of the refund period*) for classes that have started or 2) at the start date of any late start class or 3) at the time of awarding if it is past the semester census date. In addition, classes added after the census date may not be considered for supplementary aid. Finally, if I never attend, cease to attend, drop, withdraw or receive all “E’s”, my financial aid may be reduced or cancelled, and that I may be liable to repay any amount of assistance already received.

C. If I register for classes in any academic semester, and then decide not to attend, I understand that it is MY RESPONSIBILITY to drop those classes.

D. If I receive any additional financial awards from other sources, I will notify the Financial Aid Office in writing immediately. I understand that the financial aid offered by Muskegon Community College may have to be adjusted if I receive any other awards.

E. I understand that I must make normal progress towards the completion of my degree program, as set forth in the “Satisfactory Progress Policy for Financial Aid Recipients”. Failure to make satisfactory progress may result in my being ineligible for further aid. I understand that if a deferred payment is extended to me and I have pending grades from the current or prior semester, my financial aid may be canceled if I have not maintained SAP after grades are posted. I agree that I have read and understand the SAP policy in the Financial Aid Contract.

F. If I borrow through the Federal Direct Loan Program, I understand that I must notify the Financial Aid Office at MCC and my lender immediately if I cease to be enrolled in at least 6 credit hours. I also understand that I must repay the loan when it is due, and that failure to repay my loan may result in my being ineligible for any further assistance at Muskegon Community College or any other school.

G. I understand that if I do not graduate from one program before changing to another program, I may no longer be eligible for a subsidized loan and I may lose the subsidy on Direct Subsidized Loans I have already received.

H. I hereby authorize the College to release information concerning my academic progress and/or financial status to any agency or donor who contributes to my financial assistance, since this information may be essential for the continuation of such assistance. I understand that any violation of the regulations governing the financial aid programs is sufficient grounds for termination of my financial aid and referral for disciplinary action. Violations include, but are not limited to, falsification of any document used to obtain financial aid, using financial aid funds for non-educational purposes, and transfer of financial aid funds to others (e.g. using your book voucher to purchase items for others).

I. I understand that I am not eligible for financial aid if I am still in high school. This includes if you are enrolled as a duel enrolled or early college student.

J. I am not eligible for financial aid if I indicated “guest” student status on my admissions application at MCC.

K. I understand that if I fail to meet any or all of the above conditions, my financial aid may be cancelled or revoked, and that I may be liable to repay any amount of assistance already received.
Ombudsman for students
The U.S. Department of Education provides an Office of the Ombudsman to help resolve loan disputes and problems. The following options are available for contacting the office: call toll free at (877) 557-2575, visit the Web site at www.fsahelp.ed.gov, or write to:
Office of the Ombudsman
Student Financial Assistance
U.S. Department of Education
Room 3012, ROB #3, 7th and D Streets, SW
Washington DC 20202-5144

Satisfactory Academic Progress (SAP) Policy for Financial Aid Recipients

To qualify for financial aid, a student must make satisfactory academic progress toward the completion of an eligible certificate or associate degree program. This policy applies to all students who apply for help from any federal or state financial aid program. It also applies to any other program administered by the College which requires satisfactory academic progress as a criterion for eligibility.

Standards for Eligibility
Students are making “Satisfactory Academic Progress” if they meet the following conditions:

A. Maintain a cumulative grade point average (GPA) of not less than the following:

<table>
<thead>
<tr>
<th>Credit Hours Completed</th>
<th>Minimum GPA Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 11</td>
<td>1.50 cumulative</td>
</tr>
<tr>
<td>12 and above</td>
<td>2.00 cumulative</td>
</tr>
</tbody>
</table>

B. Complete with a passing grade (that is, an A, B, C, D, or P, including a grade with a “+” or “-”) two-thirds of the cumulative hours attempted. All withdrawal grades, incompletes, no-credit grades, transfer credits and repeat classes are considered as hours attempted.

C. Complete their declared program within the maximum limit. For federal aid programs, once you have attempted 150% of the number of credits normally required to complete a degree or certificate, you will not be eligible for any additional federal aid at MCC. Transfer credits classes do not count in the calculation of the GPA, but are included in the calculation of the maximum limit.

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Credits Required</th>
<th>150% limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular ASA/AAS</td>
<td>62</td>
<td>93</td>
</tr>
<tr>
<td>Nursing ASA</td>
<td>84</td>
<td>126</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>101</td>
<td>151</td>
</tr>
</tbody>
</table>

Additional Standards and Definitions

- Transfer credits, incompletes and withdrawal grades do not count in the calculation of the GPA.
- Repeating a class – a student may receive financial aid for a previously passed course only one additional time. You are allowed to repeat a failed or withdrawn course until it is passed, if otherwise maintaining SAP.
- Up to 30 remedial credits may be eligible for financial aid if they are required by the student’s academic degree program provided the total doesn’t exceed the maximum number of credits allowed by the maximum time frame standard.
- SAP calculations include all cumulative attempted credits (regardless who paid for them) registered for at the semester’s or course’s census date.
- Financial aid eligibility status - students are evaluated for SAP at the end of each semester enrolled. Eligibility status is categorized as Satisfactory, Warning or Suspension.
- The Pace of Progression is calculated by dividing the cumulative hours successfully completed by the cumulative hours attempted. Monitoring the pace of progression will ensure completion of the program within the maximum time frame.
- Only courses that apply to a student’s declared program are eligible for financial aid.
- The financial aid SAP Policy is separate from the College’s general probation/dismissal policy.

**Explanation of Eligibility Status**

1. **Satisfactory Status**: The student is in good standing and meets all conditions of the SAP policy standards.
2. **Warning Status**: The student has failed to meet one or more conditions of the SAP policy standards at the end of a semester. A student placed on warning will be allowed to receive aid for one additional semester.
3. **Suspension Status**: The student has failed to meet one or more conditions of the SAP policy standards after two consecutive semesters. A student placed on suspension is not eligible for additional aid until they 1) raise the cumulative GPA up to the minimum required, and/or 2) earn enough credits to meet the minimum cumulative completion rate required. The student would be responsible to pay for any additional classes needed to bring them back into good standing.
4. **Financial Aid Probation Status**: A student placed on probation has successfully appealed their suspension status by demonstrating that they have the ability to earn a cumulative 2.00 GPA and 67% completion rate by the end of their next semester. If after one semester on probation the student is not back to satisfactory status, they would not be eligible for future aid unless they were successfully following a Financial Aid Academic Plan.
5. **Financial Aid Academic Plan**: A student on suspension that cannot return to a satisfactory status within one additional semester must meet with an MCC counselor and develop a Financial Aid Academic Plan. The Plan must be strictly followed and the conditions set-forth must be met. The student will remain on the Plan until returning to a satisfactory status. If the conditions are not met, all future aid will be canceled. The student would be responsible to pay for any additional classes needed to bring them back into good standing.

**Loss of Eligibility, Appeal, and Reinstatement**

If you are denied aid under this Policy, you have the right to appeal. If you feel there are mitigating circumstances in your case, you must complete the “Appeal Form for Satisfactory Academic Progress (SAP) and Loan Denial”. The appeal form must be submitted to the Student Welcome Center before the beginning of the semester you wish to attend. You must address the problem(s) of why you have been unsuccessful in the past and what has changed that will allow you to be successful in the future. The Committee will normally consider such things as illness, a change in job schedule, or other extenuating circumstances (which were beyond your reasonable control) as grounds for a successful appeal. Be sure to include documentation (for example, a doctor’s statement) and a Financial Aid Academic Plan, if appropriate. To complete a Financial Aid Academic Plan, contact the Counseling and Advising Center at (231)777-0362.

Students that successfully appeal are placed on either Financial Aid Probation OR placed on a Financial Aid Academic Plan that ensures they will meet SAP standards by a specific point in time.

If you want federal aid to earn a second degree, you must appeal in writing, stating your academic goal, and provide a Financial Aid Academic Plan including documentation (such as a “graduation audit”) of the classes needed to accomplish your goal.

This policy states the minimum required for most financial aid programs. However, some scholarship and loan programs require a higher standard (usually a higher GPA). Therefore, you may qualify for most aid programs by meeting the above conditions, but be denied a specific scholarship or loan unless you raise your GPA or pass additional credit hours.

**Financial Aid Refunds**

Financial Aid recipients who withdraw from classes will have their tuition accounts adjusted according to the College’s regular tuition refund policy (see “Refund Policy”). If you find it necessary to withdraw during a semester, you should notify the Student Welcome Center in person as soon as you can.

Federal aid recipients who withdraw from ALL classes before they complete 60% of the semester may have to repay a prorated portion of the federal aid they received.
Transferring Credit to MCC

Transferring Guidelines
Muskegon Community College welcomes transfer students. We may award transfer credit for coursework from accredited institutions of higher education and the United States Military Service. Transfer credits may also be awarded for some Advanced Placement (AP), College Level Examination Program (CLEP), and International Baccalaureate (IB) examinations, as well as for Life Experiential Learning (LEAP) and Industry Recognized Credentials.

Muskegon Community College will award equivalent course credit when applicable, and when direct equivalencies are not available, elective credit in appropriate academic subjects may be awarded.

Transfer credit to MCC is determined on an individual basis using these guidelines:

- **Apply Online for Admission to Muskegon Community College.**
- **Official Transcripts and Official Score Reports** must be sent directly from each college or national testing service to:
  
  Transfer Evaluation, Room 1048-H
  Muskegon Community College
  221 S. Quarterline Rd
  Muskegon, MI 49442

- **International**-credits must be evaluated through wes.org or ece.org to be accepted for evaluation.
- **Regionally-accredited College or University** - Transfer credit must be from a regionally-accredited college or university sent directly from the College/University or Testing Service.

- **Grades** - Only courses in which a student received a grade of C or better will be considered for transfer credit.
  - Credits only, not grades are accepted in transfer. Grades are not entered on the official MCC transcript or calculated in the cumulative grade point average.
  - The total amount of transfer credit accepted from another institution will appear on the student’s MCC transcript, but not the specific credit accepted.
  - Students who transfer a course which has a higher number of credit hours than the Muskegon Community College equivalent course may be awarded the “excess” credit.

- **Residency Requirement** - A student may transfer any number of credits to MCC, however, a student must complete at least 30 credit hours, or the last 15 credit hours of a degree, at MCC in order to receive a Muskegon Community College degree.

- **Course Descriptions/Syllabi** - If a determination cannot be made on the credit a student should receive, the student may have to obtain a copy of course descriptions and/or course syllabi with objectives. The Office of the Registrar will contact the appropriate academic department for determination.

- **Evaluation Time** - Transcripts will be evaluated within approximately three to five weeks. Transcripts older than five years or from out-of-state institutions may take an extended amount of time to be evaluated due to obtaining needed course descriptions and course syllabi.
Time Limits on Transfer Credits
In most cases, credits will be accepted without a time limit from any regionally-accredited institution. In certain courses, where a program or the academic department requires that current knowledge is essential, a time limit may be imposed on the applicability of earned credit toward satisfying a degree requirement. Such a time limit must be approved by the department. The following courses must have been taken within the time limits specified:

- Accounting Courses – Must have been taken within ten years prior to the evaluation.
- Information Technology/Computer Science Courses – Must have been taken within five years prior to the time of the evaluation.
- Liberal Arts – Liberal Arts courses generally don’t have a time limit when used toward an Associate in Science and Arts Degree at Muskegon Community College.
- Medical Assistant – All non-medical assistant courses required for the medical assistant degree, must be taken within eight years prior to the time of the evaluation. If testing/coursework is over eight years old, competency must be validated on established examinations or by repeating the course. As noted on the admission checklist, Computer Science courses must have been taken within the five years prior to the time of evaluation. Medical Assistant (MA) courses cannot be transferred to MCC from another institution.

Advanced Placement Credit (AP)
AP has enabled millions of students to take national standardized exams and earn college credit.

We only accept official score reports sent directly from College Board to MCC. Please contact AP Score Reporting Services at www.collegeboard.org.

Only scores of 3 or higher will be considered for credit.

College Level Examination Program (CLEP)
CLEP is a national standardized testing program which offers tests in various academic areas. Passing scores may be accepted for college credit. The acceptance and determination of minimum scores for the CLEP exams will be determined by the department authorizing credit for that subject. Students may earn a maximum of 30 semester hours of credit through the CLEP/DANTES examinations. For more information regarding CLEP, check their website at www.collegeboard.org.

International Baccalaureate (IB)
Students who participated in an International Baccalaureate (IB) program may receive credit for completion of the Higher Level exam(s), depending on the subject area and exam score. Equivalent course credit may be granted for IB scores at the discretion of the corresponding academic department at Muskegon Community College. Due to the requirements of the Michigan Transfer Agreement (MTA), IB credits may not be used to fulfill MTA requirements at this time. Students must request for official IB examination scores to be mailed to Muskegon Community College. Official IB scores may be ordered online at https://rrs.ibo.org.

Credit for Industry - Recognized Credentials
Muskegon Community College recognizes that industry-recognized credentials, such as professional licensures and certifications, represent a level of learning and competency for which college credit may be granted. Students enrolled in a degree or certificate program at MCC may submit a current industry-recognized credential and the Credit for Industry-Related Credentials Application Form to the Office of the Registrar. The Office of the Registrar will forward the credential and application form to the appropriate academic department at MCC. Equivalent course credit may be granted at the discretion and approval of the corresponding academic department Chair.

Credit granted for industry-recognized credentials is intended to fulfill academic program requirements at MCC and is not intended to transfer to other institutions. Due to the requirements of the Michigan Transfer Agreement (MTA), credit granted for industry-recognized credentials may not be used to fulfill MTA requirements at this time. While there is not a maximum number of credits a student may be granted for industry-recognized credentials, students must complete at least 30 credit hours, or the last 15 credit hours of a degree, at MCC in order to receive a MCC degree.
Defense Activity for Non-Traditional Education Support (DANTES)
DANTES is a national standardized test in selected areas and is accepted for college credit. The acceptance and determination of minimum scores for DANTES examinations will be determined by the department authorizing credit for that subject. Students may earn a maximum of 30 semester hours of credit through the CLEP/DANTES examinations.

Military Experience
Muskegon Community College (MCC) will evaluate your military credits for possible award of transfer credits after your official military transcript has been received and you have been admitted to the College.

Joint Services Transcript (JST)
JST is the Joint Services Transcript that has replaced the Coast Guard Institute Transcript, the Army/American Council on Education Registry Transcript (AARTS) and the Sailor/ Marine American Council on Education Registry Transcript (SMART). JST is an academically accepted document approved by the American Council on Education (ACE) to validate a service member’s military occupation experience and training along with the corresponding ACE college credit recommendation. For additional information on Military Transcript Evaluation visit ACE | Military Programs and check out Joint Service Transcript (JST) Video.

Army
Email your inquiries to:
usarmy.knox.hrc.mbx.tagd-jst@mail.mil
or Call Toll Free: 1.888.276.9472
Login at JST.DODED.MIL to order transcript
Veterans now have access to electronically submit their official JST to Muskegon Community College after they register for an account on the JST website (jst.doded.mil). The steps for submitting an official transcript via the JST website are listed below:

Step 1: Register for an account with JST, if you have not done so already via jst.doded.mil.

Step 2: Log into the JST system via jst.doded.mil

Step 3: Click on the ‘Transcripts’ tab at the top of the page, and then select the ‘Official Transcript request’ tab.

Step 4: Type in the institution name or part of the name and click ‘search’ or hit the enter key. For example instead of typing in the ‘Some Name University’ you could type in ‘Some Name’. You may need to scroll through the entire list to ensure you have the correct location.

*QUICK TIP: Do not use any punctuation when typing in the name of an institution. If you receive ‘no matches found’, try using a smaller part of the institution’s name.

Step 5: This will bring you to the order page that will show your name, rate/rank, etc., and the institution name. You will be asked if this is the institution you wish to have a transcript sent to. Please ensure you pay attention to the delivery method.

Please have your official military transcripts sent directly to:

Office of the Registrar
Transfer Evaluations, Room 1048H
Muskegon Community College
221 S. Quarterline Road
Muskegon, MI 49442

Air Force
Please send a request to the College of the Air Force (CCAF) at:

CCAF/RRR
130 West Maxwell Blvd
Maxwell AFB, AL 36112-6613
https://www.airuniversity.af.edu/Barnes/CCAF/
Coast Guard
To receive your Coast Guard Transcript, you must complete a for 1560/04e (Educational Assessment Worksheet.) If your Educational Assessment Worksheet has already been completed, please request your Coast Guard Transcript by sending your completed 1560/04e to

USCG Institute
E-mail: CGI-PF-ed_transcripts@uscg.mil
Fax: 405.954.7249
Login at: JST.DODED.MIL to order your transcript

Navy/Marine Corp
Email your JST requests to:
JST Technology Operational Center
Email: jst@doded.mil

The Joint Military Transcript will be sent to the appropriate academic department for their review and possible approval.

Military transcripts will be evaluated within approximately six to eight weeks and may take an extended amount of time to be evaluated due to sending recommendations to departments for approval.

Muskegon Community College will try to award direct course equivalencies. When direct equivalencies are not available, an elective in an appropriate academic subject may be awarded. MCC is unable to grant credit for military specific credit.

Articulated Credit
Apply to Muskegon Community College online at www.muskegoncc.edu.

To apply for articulated credit students need to apply through their high school’s counseling office.

Submit official final high school transcripts to:
Enrollment Services
Muskegon Community College
221 S. Quarterline Road
Muskegon, MI 49442
admissions@muskegoncc.edu

Submit completed Articulated Credit Application form with signed competency checklists to:
Office of the Registrar, Room 1048-H
Muskegon Community College
221 S. Quarterline Road
Muskegon, MI 49442
officeoftheregistrar@muskegoncc.edu

Enroll within 24 months following high school graduation.

To finalize your articulation credit, please contact the Office of the Registrar at (231) 777-0240 or email officeoftheregistrar@muskegoncc.edu when at least six credit hours of 100 level courses or above have been completed with a cumulative 2.0 GPA at Muskegon Community College.

Students may earn a maximum of 15 credit hours toward a certificate program and 30 credit hours for an Associate degree program.

Michigan Transfer Network
The Michigan Transfer Network at www.michigantransfernetwork.org is a valuable “single source” website that students, counselors and the public may use to check transfer equivalencies for courses among colleges and
Reverse Transfer

**What is Reverse Transfer?**
Reverse transfer is an agreement between Muskegon Community College and other four-year universities within Michigan that allows students to receive an associate degree by combining credits completed at Muskegon Community with credits earned at the four-year university. An associate’s degree from MCC requires 62 credits, with various requirements, depending on your elected program. Reverse transfer is not applicable to certificates offered at MCC, only associate’s degrees.

**What are the benefits of Reverse Transfer?**
Reverse transfer provides students with an opportunity to add a marketable credential to their resume that will help give them an edge in the workforce. Obtaining an associate degree also allows students to receive full credit for their academic achievements. Students who receive their associate’s degree are more likely to finish their bachelor’s degree, increase their earning power, and increase their hire ability by showing competency and a dedication to finishing an educational milestone.

**Reverse Transfer Partners:**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Minimum MCC Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferris State University</td>
<td>30</td>
</tr>
<tr>
<td>Grand Valley State University</td>
<td>30</td>
</tr>
<tr>
<td>Western Michigan University</td>
<td>45</td>
</tr>
</tbody>
</table>

**How do I know if I am eligible?**
If you recently transferred to a four-year institution from Muskegon Community, the university’s Registrar Office will notify you via email that you are eligible for review based on the number of
credit hours you have completed, typically at the end of a semester.

**What happens next?**
If you are eligible, fill out the Reverse Transfer Release Form, included in your email and turn it into your university’s Registrar Office. The form and your transcripts will be released to Muskegon Community College and they will be reviewed to see if you have qualified to be awarded the associates degree. All correspondence regarding the results of the review will be sent directly to you from Muskegon Community College.

Am I guaranteed a degree from Muskegon Community College?
No. The sending of your transcript to MCC does not guarantee the granting of a degree. The courses you have completed will be evaluated and is subject to the degree and residency requirements of Muskegon Community College, which will be the degree granting institution. A minimum grade point average of a 2.0 is required.

How will I be notified to know if I qualify?
You will be informed by the email address submitted with the reverse transfer form if you meet or do not meet the degree requirements.

For more information:
Muskegon Community College
Email: officeoftheresgistrar@muskegoncc.edu

---

**Transcripts**

Transcripts must be requested online at www.muskegoncc.edu/alumni-relations/transcript-request/. Transcripts that are released to the student are unofficial. Transcript requests are normally processed within two or three days, but may require more time to process at the end of a semester. Your signature is required before we can release your transcript. Official transcripts must be sent directly to a college/university or business. “Sealed transcripts” are available but are “issued to student.” Transcript requests will not be processed if you have delinquent accounts at the College.

Unofficial transcripts may be printed online using MyMCC, under Self-Service then Academics.

**OR**

Official transcripts are issued DIRECTLY to an institution or place of business with the official college seal and registrar’s signature. They are used for college or university transfers, job applications, scholarships, etc. Official transcripts are issued only after students have fulfilled all financial obligations to the College. If a transcript request is for pick up or mailed directly to the student, it will be unofficial. Official transcripts must be ordered online through the National Student Clearinghouse at www.muskegoncc.edu/alumni-relations/transcript-request/.

No Exceptions
Muskegon Community College does not fax transcripts. Transcript requests cannot be accepted verbally or from friends, spouse or relatives in accordance with the Family Educational Rights and Privacy Act of 1974.

**What happens next?**
If you are eligible, fill out the Reverse Transfer Release Form, included in your email and turn it into your university’s Registrar Office. The form and your transcripts will be released to Muskegon Community College and they will be reviewed to see if you have qualified to be awarded the associates degree. All correspondence regarding the results of the review will be sent directly to you from Muskegon Community College.

Am I guaranteed a degree from Muskegon Community College?
No. The sending of your transcript to MCC does not guarantee the granting of a degree. The courses you have completed will be evaluated and is subject to the degree and residency requirements of Muskegon Community College, which will be the degree granting institution. A minimum grade point average of a 2.0 is required.

How will I be notified to know if I qualify?
You will be informed by the email address submitted with the reverse transfer form if you meet or do not meet the degree requirements.

For more information:
Muskegon Community College
Email: officeoftheresgistrar@muskegoncc.edu

---

**Transcripts**

Transcripts must be requested online at www.muskegoncc.edu/alumni-relations/transcript-request/. Transcripts that are released to the student are unofficial. Transcript requests are normally processed within two or three days, but may require more time to process at the end of a semester. Your signature is required before we can release your transcript. Official transcripts must be sent directly to a college/university or business. “Sealed transcripts” are available but are “issued to student.” Transcript requests will not be processed if you have delinquent accounts at the College.

Unofficial transcripts may be printed online using MyMCC, under Self-Service then Academics.

**OR**

Official transcripts are issued DIRECTLY to an institution or place of business with the official college seal and registrar’s signature. They are used for college or university transfers, job applications, scholarships, etc. Official transcripts are issued only after students have fulfilled all financial obligations to the College. If a transcript request is for pick up or mailed directly to the student, it will be unofficial. Official transcripts must be ordered online through the National Student Clearinghouse at www.muskegoncc.edu/alumni-relations/transcript-request/.

No Exceptions
Muskegon Community College does not fax transcripts. Transcript requests cannot be accepted verbally or from friends, spouse or relatives in accordance with the Family Educational Rights and Privacy Act of 1974.
Confidentiality of Records

Notification to Students of Rights Under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. They are:

The **right** to inspect and review the student’s education records within 45 days of the day the College receives a request for access. Students should submit to the Registrar a written request that identifies the record(s) they wish to inspect. The College will make arrangements for access and notify the student of the time and place where the records may be inspected.

The **right** to request the amendment of the student’s education record that the student believes is inaccurate or misleading. Students may ask the College to amend a record that they believe is inaccurate or misleading. Students should submit to the Dean of Student Services a written request, clearly identifying the part of the record(s) 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, the College will notify the student 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.

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, research, or support staff position; a person or company with whom the College has contracted (such as an attorney, auditor, or collection agency); 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.

The **right** to file a complaint with the U.S. Department of Education concerning alleged failures by Muskegon Community College 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
400 Maryland Avenue SW
Washington, DC 20202-4605
Muskegon Community College will not disclose student records to anyone other than the student (including the student’s parents), without the student’s written permission. However, FERPA does establish several exceptions that allow the institution to disclose student records without the student’s prior written consent. Some of these exceptions are:

1. To other school officials with a legitimate educational interest.
2. To officials of other schools in which the student seeks to enroll.
3. In connection with a student’s application for, or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
4. If disclosure is necessary to protect the health or safety of the student or other persons in a health or safety issue.
5. To comply with a judicial order or to respond to a lawfully issued subpoena, provided the College first make a reasonable attempt to notify the student.
6. Directory information as defined by Muskegon Community College. You should always contact the Dean of Student Services before releasing student records to a third party, even if you think one of these exceptions applies.
7. To certain officials of the U.S. Department of Education, the Controller General, and the state or federally supported education programs.
8. To organizations conducting certain studies for or on behalf of the College.
9. To accrediting organizations to carry out their accrediting functions.
10. To parents of an eligible student who claim the student as a dependent for income tax purposes – IRS Code of 1986, Section 152.
11. To an alleged victim of any crime of violence of the results of any institutional disciplinary proceeding against the alleged perpetrator of that crime with respect to that crime.
12. Veterans Administration Officials in response to requests related to VA programs.
13. Representative of the Immigration and Naturalization Services (INS) for purposes of the coordinated interagency partnership regulating international students (SEVIS).
14. As of January 3, 2012, the U.S. Department of Education’s FERPA regulations expand the circumstances under which your education records and personally identifiable information (PII) contained in such records – including your Social Security Number, grades, or other private information – may be accessed without your consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or
15. State and local education authorities (“Federal and State Authorities”) may allow access to your records and PII without your consent to any third party designated by a Federal or State Authority to evaluate a federal – or state-supported education program. The evaluation may relate to any program that is “principally engaged in the provision of education,” such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without your consent PII from your education records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.
**Directory Information**

The College designates certain information as “directory information.” This may be disclosed without violating FERPA. It includes:

1. Student’s name
2. Major field of study
3. Weight and height of athletes
4. Participation in officially recognized activities and sports
5. Dates of attendance, degrees, date of graduation and awards
6. Photographs

Directory information does not include student identification numbers, Social Security numbers, or other personally identifiable information.

MCC considers student mailing address and email address to be Limited Directory Information that may be disclosed, without the student’s written consent, only for educational purposes and at the discretion of College administration. This includes (but is not limited to):

1. MCC may disclose eligible students’ mailing address and email address to the Phi Theta Kappa (PTK) Honor Society for the purpose of PTK inviting students to join the honor society and receive the benefits of PTK membership.

2. MCC may disclose student mailing address and email address to representatives from other colleges and universities who are seeking to offer educational and/or scholarship opportunities to MCC students or graduates.

MCC will not disclose student contact information to outside organizations seeking to use such information for noneducational, commercial purposes.

**Non-Disclosure Form**

Students wishing the College to withhold directory information on them may do so during the first week of classes by submitting the Non-Disclosure form to the Registrar. Forms are available online or at the counter in the Student Welcome Center.

**Right-to-Know**

*Legal completion persistence rates*

For the latest graduation rate and other performance-related data of MCC, please see the college dashboard at [www.muskegoncc.edu/dashboard](http://www.muskegoncc.edu/dashboard).

To get more information on MCC’s tuition and price of attendance relative to other colleges, you can visit the College Affordability and Transparency Center of the US Department of Education at [collegecost.ed.gov/catc](http://collegecost.ed.gov/catc).
MCC has five permanent advisory councils, representative of the major service functions of the college: Instructional Affairs Council, Student Services Council, Business Administration Council, Information Technology Council, and the Joint Sustainability Council. A sixth council, the Coordinating Council, serves as the clearinghouse for all actions put forth by the advisory councils. The Coordinating Council expedites and implements recommendations made by the five councils.

These councils, in cooperation with the administration, Faculty Association, Student Government Association and non-teaching associations, provide orderly channels for seeking opinions, expressing ideas and developing recommendations. It is expected that these councils will be primarily policy-planning and recommending in their functions. However, it is conceivable that the councils may, on occasion, serve as sounding boards for determining the merit of a new idea or to discuss the feasibility of calling for a review of established polices, practices and/or procedures. Individuals who have proposals for consideration should forward them to the appropriate council through the Council Chairperson.

Procedural Guidelines for All Councils
A. Each Council will act to adopt its agenda as the first order of business.
B. Councils will take action by consensus rule or vote, as determined by individual councils.
C. Council meetings will be scheduled according to each council’s bylaw.
D. Representatives are expected to attend all meetings.
E. A quorum will consist of a simple majority of voting membership.
F. Term of membership will be one (1) academic year and is renewable. Vacancies will be filled through appointments by the respective group.
G. Chairperson is to be elected according to each council’s bylaw.
H. Chairperson’s Duties:
   1. Presiding Officer
   2. Appoint Chairperson and members of sub-committees
   3. Ex-officio member of all sub-committees
   4. Council representative to Coordinating Council
I. Members of Ad-hoc committees or sub-committees need not be members of any Council.
J. Each Council shall decide their own voting membership.

Council by-laws, meeting agendas, and meeting minutes may be reviewed through Campus Governance on MyMCC.
Petitions Committee

The Petitions Committee, a standing committee of the Student Services Council, is composed of faculty members, staff, and students. The Committee exists to consider the appeals of students with respect to any MCC rule, regulation, or grade. All refund appeals must be received no later than one semester from the last date of the semester being appealed, or for grade appeals, one year from the date the grade was officially recorded.

Final Grade/Attendance Appeals

If a student chooses to appeal a grade, he/she must complete a Final Grade Appeal form and follow the steps outlined on the form to attempt to resolve the complaint (also listed below). The appeal MUST include a typed letter of explanation of what is being appealed, why it is being appealed and the requested outcome. Any documentation that is pertinent to the appeal should be included.

Steps of the Final Grade Appeal Process:

1. CONSULT WITH INSTRUCTOR to see if an understanding can be reached. If the instructor denies the request, ask the instructor to provide a written response by completing step one on the back of the Final Grade Appeal form. The instructor’s response should include a copy of the course syllabus along with an explanation of how the grade was determined.

2. CONSULT WITH DEPARTMENT CHAIRPERSON if step one is denied by the instructor. Continue the appeal by consulting with the Department Chairperson in which the course was offered. The Department Chairperson should provide a written opinion of the appeal along with any additional pertinent information.

3. CONSULT WITH THE VICE PRESIDENT FOR ACADEMIC AFFAIRS or designee if step two is denied by the Department Chairperson to continue the appeal. The Vice President for Academic Affairs or designee will provide a written opinion of the appeal along with any additional pertinent information.

4. FINAL GRADE APPEAL REVIEWED BY PETITIONS COMMITTEE
   If not satisfied with the outcome of the previous decisions, submit the written appeal with Steps 1-3 completed, the typed letter of explanation of what is being appealed and why, along with any pertinent documents attached to the Student Welcome Center.

5. Once a completed Final Grade Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to attend the meeting. The student will be notified of the meeting location, date and time by the Registrar upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.
Residency Change Appeals
Form available at the Student Welcome Center or on MyMCC.

MCC Board Policy states a student must live within the confines of Muskegon County for at least six months prior to the start of the semester in order to receive In-County Tuition or within the confines of the State Michigan in order to receive Out-of-County Tuition. If a student has proper documentation, but requests the change after the start of the semester, a Tuition Refund Appeal for Residency Change must be completed with the following requirements:

1. A complete Student Personal Data Change Request form with proof of residency (see form for allowable documents) for at least six months prior to the start of the semester being appealed.
2. If the student received financial aid for the semester being appealed, the appeal must first be reviewed by a Financial Aid representative.

3. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to attend the meeting. The student will be notified of the meeting location, date and time by the Registrar upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

Tuition Refund Appeals Due to Course Related Issues
Form available at the Student Welcome Center or on MyMCC.

If a student withdraws from a class after the refund period has ended due to a Course Related Issue, he/she can appeal for a refund. A Tuition Refund Appeal form must be completed. The appeal MUST include a typed letter of explanation of what is being appealed, the reason for appeal, and any specific remedy being requested. Any documentation that is pertinent to the appeal should be included.

1. Discuss the issue with the instructor to see if an understanding can be reached. If an agreement cannot be reached, ask the instructor to provide a written response.

2. To continue the appeal, consult with the Department Chairperson in which the course was offered. Ask the Department Chairperson to provide a written opinion of the appeal along with any additional pertinent information.

3. If step two does not resolve the issue, consult with the Vice President or designee to continue the appeal. Ask the Vice President for Academic Affairs or designee to provide a written opinion of the appeal along with any additional pertinent information.

4. If not satisfied with the outcome of the previous discussions, submit the written appeal with Steps 1-4 completed, a typed letter of explanation of what is being appealed, the reason for appeal, and the requested remedy, along with any pertinent documents to the Student Welcome Center. Note: If the student received financial aid for the semester being appealed, the appeal must first be reviewed by a Financial Aid representative before being submitted to the Student Welcome Center.

5. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to attend the meeting. The student will be notified of the meeting location, date and time by the Registrar upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.
Students may appeal for a tuition refund due to a Verifiable Error of MCC when information was given to the student by a MCC staff member that was incorrect. A Tuition Refund Appeal form with the steps outlined on the form in an attempt to resolve the complaint (also listed below) must be completed. Any documentation that is pertinent to the appeal should be included.

1. The appeal MUST include a typed letter of explanation of what is being appealed, the reason for the appeal, and any specific remedy being requested.
2. A detailed account of the problem and relevant documents on College letterhead from the College Office involved or advisor indicating that incorrect information was given by a College representative.
3. If the student received financial aid for the class(es) being appealed, the appeal must first be reviewed by a Financial Aid representative.

Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to attend the meeting. The student will be notified of the meeting location, date and time by the Registrar upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

Students may request to have a grade changed to Withdrawal Illness (WI) due to an illness or injury of the student or a close family member in addition to requesting a refund/credit for amount due. In the case of a death of a close family member, students can also appeal for a Withdrawal Illness (WI) due to bereavement. The Tuition Refund Appeal must be completed with the following requirements:

1. The appeal MUST include a typed letter of explanation of what is being appealed, the reason for the appeal, and any specific remedy being requested.
2. FOR ILLNESS/INJURY – A signed statement on letterhead from the health care provider must describe in writing the medical condition (whether injury or illness), how it has incapacitated the student, and recommending withdrawal of all classes or specific classes and why. Excuse slips, copies of invoices, appointment confirmations, statements of insurance payments, etc. are not acceptable documentation.
3. FOR BEREAVEMENT - Documentation that clearly indicates the name and date of the deceased and includes the name of the student and the relationship. The relationship must be clearly indicated within the documents. Example: Death certificate of deceased parent and birth certificate of student should show the relationship.
4. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to attend the meeting. The student will be notified of the meeting location, date and time by the Registrar upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.
Students may request to have a grade changed to Withdrawal Military (WM) due to induction into the US Military. The Tuition Refund Appeal must be completed with the following requirements:

1. The appeal MUST include a typed letter of explanation of what is being appealed, the reason for the appeal, and any specific remedy being requested.
2. An induction letter or orders from the US Military including the date of induction or call up.
3. If the student received financial aid for the class(es) being appealed, the appeal must first be reviewed by a Financial Aid representative.

4. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to attend the meeting. The student will be notified of the meeting location, date and time by the Registrar upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

Tuition Refund Appeal and Withdrawal Military (WM)

Form available at the Student Welcome Center or on the MyMCC.
Student Code of Conduct

Article I: Statement of Purpose

The Board of Trustees, administration, faculty, and staff of Muskegon Community College have a primary concern for the academic achievement standards and personal integrity of our students. We recognize our obligation to protect MCC property and we take a special interest in the mental and physical health and safety of our community. We are committed to preserving the peace, uplifting campus morale, and creating a civil climate on our campus. Students enrolling in MCC as well as visitors on campus assume an obligation to behave in a manner compatible with the MCC’s function as an educational institution. MCC has adopted the following policies and procedures as an expression of its expectations of student conduct.

Article II:

Section A: Jurisdiction of MCC

College jurisdiction extends to individuals and conduct on college premises as well as student conduct which occurs off college premises or online and which adversely affects members of the MCC community and/or the pursuit of the MCC mission.

Section B: Conduct-Rules and Regulations

Any student or organization found to have committed or to have attempted to commit any of the following acts of misconduct is subject to the disciplinary sanctions outlined in Article IV.

Section 2.01
Acts of being dishonest or facilitating academic dishonest, including, but not limited to:
(a) Cheating, including cyber cheating
(b) Fabricating
(c) Plagiarizing, including internet plagiarizing
(d) Committing acts of forgery
(e) Bribing, purchasing or receiving another’s work and using or submitting it as one’s own
(f) Submitting the same assignment to more than one instructor without the permission of the instructors

Section 2.02
Violation of any provisions of the professional and/or ethical codes of programs in the fields of respiratory therapy, nursing, or any other applicable programs.

Section 2.03
Interference with the college-approved operation of any college-recognized student organization.

Section 2.04
Disorderly conduct affecting (but not limited to): administration, disciplinary proceedings, disruption or obstruction of teaching, research, and other college and campus activities.

Section 2.05
Conduct which alarms, threatens, or in some manner unreasonably disrupts the learning process of another student and/or the ability of faculty to teach.

Section 2.06
Physical abuse, verbal abuse, threats, intimidation, stalking, coercion and/or other conduct which threatens or endangers the health, well-being, or safety of any person.

Section 2.07
Sexual misconduct. (See the Sexual Misconduct Policy)

Section 2.08
Harassment which serves to degrade the status of another person. Most often, harassment focuses on a personal attribute, singling it out for ridicule, attack, or disparagement. Such attributes include, but are not limited to age, economic class, gender, gender identity, transgender status, physical or mental disability, race or ethnic origin, religion, and sexual orientation, gender identity and transgender status. Harassment may include physical contact, written, electronic or verbal comments or suggestions, obscene or offensive pictures or jokes, hostile or threatening gestures or other forms of degradation. This includes acts of harassment carried out by one or more students on behalf of and/or at the request of another student.

Section 2.09
Theft or unauthorized use or possession of and/ or damage to property of MCC, property of a member of the MCC community, or other personal or public property.
Section 2.10
Hazing, which is an act which endangers the mental or physical health or safety of a student, or involves the forced consumption of liquor or drugs, or which destroys or removes public or private property for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in a group or organization. Consent of the participants is not a defense against a complaint of hazing.

Section 2.11
Failure to comply with directions of an MCC employee, or emergency or service personnel acting in performance of their official duties.

Section 2.12
Failure to identify oneself to an MCC employee, or emergency or service personnel acting in performance of their official duties when requested to do so.

Section 2.13
Unauthorized possession, duplication or use of keys, combinations, or access cards or codes to any MCC premise, or unauthorized entry to or use of MCC property.

Section 2.14
Violation of published MCC policies, rules, or regulations found in, but not limited to, the college course catalog.

Section 2.15
Use, possession, or distribution of illegal drugs, narcotics or other controlled substances, and drug-related paraphernalia, except as permitted by federal, state, and/or local law. (See the Drug-free Campus Policy.)

Section 2.16
Public intoxication or the use, possession or distribution of alcoholic beverages except as expressly permitted by federal, state, and/or local law and MCC regulations (See the Drug Free Campus Policy.)

Section 2.17
Possession of firearms, explosives, or other weapons, or unauthorized use of dangerous chemicals or substances on MCC premises. (See the Weapons Policy.)

Section 2.18
Participation in a campus demonstration which disrupts the normal operations of MCC and infringes on the rights of other members of the MCC community; leading or inciting others to disrupt scheduled, and/or normal activities within any campus building or area.

Section 2.19
Intentional obstruction of the free flow of pedestrian or vehicular traffic on MCC premises or at MCC sponsored or supervised functions.

Section 2.20
Conduct which is disorderly, lewd, or indecent; a breach of peace; or aiding,abetting, or procuring another person to breach the peace on MCC premises or at functions sponsored by, or participated in, by MCC.

Section 2.21
Theft or other abuse of computer resources, including, but not limited to:

(a) Commercially using computing resources
(b) Intercepting data
(c) Committing acts of forgery
(d) Willfully engaging in practices that place undue burdens on MCC resources (spamming, for example)
(e) Unauthorized copying, modifying, or destroying the MCC network or Internet-based files
(f) Accessing or attempting to access or use the MCC network or Internet resources for which the user is not authorized or granted explicit permission

Section 2.22
Abuse of the disciplinary, including but not limited to:

(a) Failing to comply with the directive to appear attend or attend a meeting with an administrator after having received appropriate notification of such directive, falsifying, distorting, or misrepresenting information.
(b) Disrupting or interfering with the orderly conduct of a disciplinary proceeding
(c) Influencing or attempting to influence another person to commit an abuse of the disciplinary system
(d) Attempting to discourage an individual’s proper participation in, or use of the disciplinary system
Section 2.23
Engaging in gambling activities defined as illegal by federal, state or local law and/or MCC regulations.

Section 2.24
Engaging in behavior prohibited by federal, state, and/or local laws.

Article III: Disciplinary Procedures

Student misconduct may be handled in one of two possible ways: counseling or disciplinary action. Counseling will occur when a student appears to have behavioral problems that stem from emotional or psychological difficulties. Disciplinary action may be taken immediately in an emergency situation by the Dean of Student Services or designee if the welfare of the individual or other is endangered. Action taken should be documented to the Provost and Chief Student Services Officer of MCC.

Section A: Complaints and Resolution

Section 3.01
Any member of the MCC community may file a complaint against a student for allegedly violating the Code of Conduct. The person who files the complaint shall be the reporting party. The student alleged to have violated the code of conduct shall be the responding party.

Section 3.02
All complaints shall be prepared in writing and directed to the Dean of Student Services or designee. A complaint shall contain:

(a) The identity of the reporting party and the responding party;
(b) The specific element(s) of the code of conduct alleged to have been violated;
(c) The date, time, and place of the alleged violation(s);
(d) Supporting documentation if any exists; and
(e) The names of any witnesses.

Section 3.03
All reports or complaints should be made as promptly as feasible after the concurrence. A delay in reporting may be reasonable under some circumstances, as determined on a case-by-case basis. An unreasonable delay in reporting, however, may be taken into consideration in evaluating the complaint or report.

Section 3.04
The Dean of Student Services or designee shall determine if the alleged conduct may constitute a violation of the code of conduct. If so, the case shall proceed for adjudication.

Section B: Resolution

Section 3.05
Filing a complaint shall not always require a formal adjudication process. In the event that the Dean of Student Services or designee elects to seek an informal resolution, he/she may review all relevant information, interview pertinent witnesses and bring together the reporting party and responding party, if desirable.

Section 3.06
Resolution shall be achieved when the Dean of Student Services or designee and the reporting and responding party, are satisfied that the behavior at issue has been addressed and a mutually acceptable outcome has been achieved. The resolution shall be written by the Dean of Student Services or designee and emailed to both parties.
Section 3.07
A party’s failure to respond to a request by the Dean of Student Services or designee’s request to participate in an informal resolution or the failure to appear or participate in an informal resolution may result in a letter to both parties, warning that failure to respond may result in a referral of the complaint to the disciplinary board for a hearing.

Section 3.08
If the Dean of Student Services or designee is unable to resolve the complaint to the mutual satisfaction of both the reporting party and the responding party, the Dean of Student Services or designee shall advise the reporting party and responding party of his/her rights to proceed formally.

Section C:
Findings of Fact and Recommendations
Section 3.09
After reading statements, interviewing responding party, witnesses, and reviewing evidence, a member of the Behavioral Intervention Team shall either dismiss the complaint or find that the responding party violated the code of conduct.

Section 3.10
Finding that the responding party violated the code of conduct shall be made on the basis of whether it is more likely than not that the responding party violated the code of conduct.

Section 3.11
The responding party shall be presumed not responsible for a violation of the code of conduct until it has been demonstrated through credible information and evidence that it is more likely than not that the student committed the violation.

Section 3.12
If the Behavioral Intervention Team member determines that the responding party violated the Code of Conduct, they shall recommend a sanction for the violation.

Section D:
Appeal Procedure
Section 3.13
A student may appeal the outcome of the matter. A review of the matter will be prompt. A party may seek review only on the following grounds.
(a) To consider new information sufficient to alter the decision, or other relevant facts not brought out in the original hearing, because such information was not known or knowable to the person appealing during the time of the hearing.
(b) To allege a procedural error within the process that may have substantially impacted the fairness or outcome of the investigation.

Section 3.14
Appeals must be submitted in writing to the Provost and Chief student Services Officer or designee within 7 business days from the day of the parties are notified about the outcome of the Formal Resolution. Upon receipt of an appeal the Provost and Chief Student Services Officer or designee will appoint an appellate review panel of 3 members from a pool of trained Behavioral Intervention Team members. The panel will review the material within 15 days of receipt of the appeal. The panel will examine all documentation of the process and report to determine if there is a reasonable basis for changing the outcome. The panel will issue a written determination of the appeal, which could include:
(a) Affirm the original finding and sanction
(b) Affirm the original finding but issue a new sanction, which may be of greater or lesser severity, based on the new information.
(c) Change original finding to not responsible for violation of the code of conduct due to a procedural or factual defect. All sanctions are dismissed.

Section 3.15
The panel’s determination is final. The student shall receive written notice of the outcome of the appeal which will include any change to the result that occurs prior to the time that such results become final; and when such results become final.

Section 3.16
Potential student sanctions will be applied based upon the facts and circumstances of the case. Possible student sanctions may include those listed in Article IV Section A but may include counseling and/or disciplinary action including but not limited to: reprimand, warning, no contact order, loss of privileges, suspension, probation, or dismissal from the College.

Section 3.17
Recommended sanctions will not be imposed while the appeal is being reviewed unless the nature of the conduct under review or other circumstances involved dictate otherwise.
Article IV: Sanctions

Section A: Interim Suspension of Privileges

Section 3.18 Faculty members retain the right to remove from the classroom (for the duration of that class period) any student demonstrating disruptive behavior. It is the responsibility of the faculty member to report the incident to the Dean of Student Services or designee and to indicate if they do not want the student to return to class (interim suspension) and the rationale for that request. This request will be acted upon by the Dean of Student Success or designee prior to the next class session.

Section 3.19 The Dean of Student Services or designee may issue an interim suspension of privileges for the following reasons:
(a) To insure the safety and well-being of members of the MCC community or to preserve MCC property;
(b) To insure a student’s safety or wellbeing; or
(c) If a student poses a threat of disruption or interference with the normal operations of MCC.

Section 3.20 During the interim suspension, a student may be denied access to MCC activities, facilities, classes, or other privileges for which the student might otherwise be eligible, as the Dean of Student Success or designee may determine to be appropriate.

Section 3.21 The decision to suspend privileges for an interim period shall be communicated by the Dean of Student Success or designee in writing to the responding party and shall be effective immediately. Notification shall either be delivered via students MCC email account or sent by certified mail. Failure or refusal to take receipt of notification shall not negate or postpone said action. The appropriate MCC officials shall be notified of the interim suspension including those directly involved in the pending complaint.

Section 3.22 The interim suspension of privileges shall remain in effect until a final decision has been made regarding pending complaints or until the Dean of Student Success or designee determines that the reason for imposing the interim suspension of privileges no longer exists. Absent exigent circumstances, or unless otherwise agreed to by both parties, an expedited hearing shall take place within 10 business days of notification of the interim suspension.

Section B: Other Sanctions

Section 3.23 The following sanctions may be imposed individually or in combination for any violation(s) of the code of conduct:
(a) Reprimand. A verbal or written reprimand may be issued for minor forms of misbehavior. The reprimand will be recorded in the Office of the Provost and Chief Student Services Officer but will not become part of the student’s official record.
(b) Warning. A written notice to the student, identifying the nature of the code of conduct violation(s). The warning shall be placed in the student’s official record.
(c) Loss of privileges. Revocation of specified privileges for a specified time period (use of MCC facilities, co-curricular activities, and work study, for example).
(d) Restitution. Compensation for loss, damage, or injury. Restitution may be monetary, an appropriate form of service, or the replacement of specific materials, as dictated by the situation.
(e) Educational project. Completion of a project specifically designed to help the student understand why the violation of the code of conduct was inappropriate.
(f) Probation. A written reprimand for violation of a specified item in the code of conduct. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found responsible for violating the code of conduct during the probationary period.
(g) Suspension. Separation from MCC for a specified period of time after which the student is eligible to return or the organization may resume its activities.
(h) Permanent separation from MCC.

**Section 3.24**
The proper MCC authorities shall be notified of any sanction imposed.

**Section 3.25**
Sanctions shall be recorded in the student’s official file and a record of it will be maintained in the office of the Provost and Chief Student Services Officer. (Minor forms of misbehavior will not become part of the student’s official record.). To the maximum extent permitted under FERPA, all records are considered educational records.

**Section 3.26**
The following sanctions may be imposed upon student clubs or organizations:
(a) The sanctions are listed above in Section B: Other Sanctions
(b) Deactivation or loss of recognition for a specified period of time.

**Article V: Withdrawal and Readmission**

The Provost and Chief Student Services Officer shall be advised of any student who voluntarily withdraws from MCC while a complaint is pending. The student must present adequate evidence of permission to re-enroll. Permission for reenrollment may be granted only after the complaint has been resolved, unless circumstances dictate otherwise. If the complaint cannot be resolved because the complainant, witnesses or evidence are not available, such permission may be denied by the Provost and Chief Student Services Officer.
Dispute Resolution Process
Should a student not agree with a faculty member’s decision or actions as they may relate to this policy, the following steps shall be followed:

A. A student suspected of academic dishonesty shall be notified in writing within two school days of the time the violation is discovered. Copies of the written notification shall also be filed with the department chair and the Provost and Chief Student Services Officer.

B. The student should try to reach resolution of the matter through direct discussion with the involved faculty member within three school days of the written notification.

C. If the matter is not resolved in Step B, the student shall bring the matter to the attention of the department chairperson of the involved faculty member.

D. If the matter is not resolved at the department chairperson level, the student shall bring the matter to the attention of the Vice President for Academic Affairs who shall render a decision within five school days of the receipt of the dispute information.

E. If a satisfactory solution is not reached at the Step D level, the student may file a written request with the Provost and Chief Student Services Officer for a hearing before the disciplinary board. This meeting shall be held not more than 20 days following the written request. A student may request a hearing before the disciplinary board.

Academic/Classroom Conduct

Muskegon Community College is a community of scholars whose members include administrators, faculty, staff, and students. Mutual respect and civility are expected in the classroom or other college related academic settings, as well as, in any communication.

- MCC has the duty of providing students with privileges, opportunities, and protections that best promote learning;
- Students have the right to a non-threatening learning environment;
- Students have the responsibility to refrain from infringing on the right of others to learn or the right of teachers to teach; and
- Any student whose behavior disrupts learning may be subject to disciplinary action.

Academic Integrity Policy

Muskegon Community College expects that all faculty and students will adhere to high standards of personal and academic honesty. This means that all academic work will be done by the student to whom it is assigned without unauthorized aid of any kind. Faculty members, for their part, will exercise care in the planning and supervision of academic work so that honest effort will be positively encouraged.

Definitions

Academic dishonesty consists of, but is not limited to:

A. Cheating. Cheating is defined as using or attempting to use, giving or attempting to give, and obtaining or attempting to obtain, materials or information, including computer material pertaining to a quiz, examination, or other work that a student is expected to do alone.

B. Plagiarism. Plagiarism is defined as the use of another’s words or ideas without acknowledgement.

Penalties for violation of these standards of conduct may result in sanctions of up to and including suspension or expulsion from MCC.
Computer Usage Policy

Standards for Acceptable Computer Use at Muskegon Community College
Muskegon Community College would like to promote the free exchange of ideas for learning, teaching, and research through the use of our technology including the Internet, personal computers, local networks, specialized hardware, and software applications. Computers on campus are intended for enrolled college students. Permission may be granted to adult college visitors. Acting in ways that are mutually respectful of others are good foundations for responsible, legal, and ethical uses of our technology. In addition, you should consider your actions with respect to the following standards when using MCC’s technological resources:

- Respecting the personal privacy of others
- Honoring the intellectual property of others
- Following established laws and college policies
- Treating people and equipment around you with care and respect as well as not engaging in any activities that would disrupt others
- Honestly representing yourself and the information you provide others
- Freeing limited technological resources for others to complete their college assignments whenever possible
- Not exposing others to materials which may reasonably be construed as offensive
- Not changing the setup or configuration of software or hardware that does not belong to you

Unacceptable Computer Use at Muskegon Community College
Access to technology at MCC is a privilege that can be withdrawn when an individual abuses it. By logging into an MCC computer you agree to the above standards of acceptable computer use. An individual can lose MCC computer privileges by committing any of the following transgressions:

- Unauthorized Actions. This would include access to any computer system to modify or view files, passwords, or other data along with damaging or altering software components on any network or database.
- Illegal Actions. This would include making copies of licensed or copyrighted software and data without documented permission.
- Malicious Actions. This includes exposing our wireless network to viruses or other destructive software, as well as, sending unsolicited email messages, including spam or other advertising material to individuals who did not specifically request such material, except as approved under the Email Policy.
- Disruptive Actions. This includes, but is not limited to, port scanning, Internet protocol spoofing, network analysis, network monitoring, running traffic generating applications, installing illegal software, or sending offensive electronic communications.
- Disrespecting Others. This includes loud talking, listening to loud music, aggressive behaviors, and sending offensive electronic communications.
- Misrepresenting oneself as another user or sharing passwords with others.
- Displaying or playing text, graphics, audio or video, which may reasonably be construed as offensive to the public.
- Failing to pay fees or fines assessed by MCC.
Wireless Computer Access Policy

Scope
This policy applies to the deployment and operation of wireless network equipment and other devices operating in unlicensed frequencies on the campus of Muskegon Community College. The policy also applies to all segments of MCC’s wireless computer network. This includes all administrative, academic, and commercial areas which are part of MCC’s family of buildings, as well as, any outdoor spaces on the campus.

Responsibilities
MCC would like to encourage people to use their own technology on our campus. To promote this we provide wireless access to various computer networks. Users of wireless connections at MCC are required to keep their computer’s virus protection up-to-date, as well as, install the latest operating system security patches.

In addition, users need to be aware that MCC does not filter wireless access to the Internet and cannot provide secure wireless connections or printing services to those wireless connections. As a result, MCC is not responsible for the loss or damage that may occur, directly or indirectly, to personal equipment and data through the use of our wireless connections. Parents or guardians are responsible for children brought onto campus.

MCC’s computing and telecommunication networks, computing equipment and computing resources are owned by MCC and are provided to support its academic and administrative functions. Federal and state laws, along with MCC policies and standards, govern the use of this equipment and technologies. While departments may adopt additional rules and regulations to meet specific administrative or academic needs, any additional requirements must be in compliance with applicable federal and state laws, and this policy.

Access to MCC’s wireless computer networks is a privilege that can be withdrawn when individuals abuse it. Behaviors that result in the loss of computer network privileges and possibly disciplinary actions are found in the Computer Usage Policy.

Enforcement
The Office of Information Technology (OIT) is solely responsible for implementation of wireless technology, enforcing campus network standards, and has the authority to resolve frequency interference issues. OIT determines the identity and authenticates all users connecting to the campus network.

Standards
MCC has adopted the Institute of Electrical and Electronic Engineers, Inc. (IEEE) standard protocols for wireless networking. The primary purpose of these protocols is not so much to provide separate networks but to ensure that adjacent access points with slightly overlapping areas of coverage do not interfere with each other. It is therefore not feasible to allow individuals to install their own access points without centralized coordination, due to the resulting signal interference and greatly degraded performance of the common wireless network. Access points can interfere with each other and other communications devices or appliances if not administered or deployed properly. Potential problems using microwave ovens and cordless telephones is a prominent example. OIT will manage the shared use of unlicensed frequencies for the campus community and campus authority to resolve interference issues.

SSID for Muskegon Community College wireless is MCC Students & Staff
It is therefore not feasible to allow individuals to install their own access points without centralized coordination, due to the resulting signal interference and greatly degraded performance of the common wireless network. Access points can interfere with each other and other communications devices or appliances if not administered or deployed properly. Potential problems using microwave ovens and cordless telephones is a prominent example. OIT will manage the shared use of unlicensed frequencies for the campus community and campus authority to resolve interference issues.
Email Policy

General Statements
Electronic mail is provided to students, employees, and retirees for the official business and educational purposes of MCC. However, MCC recognizes that use of email will occasionally be personal. Accordingly, MCC authorizes the incidental, non-commercial, and personal use of email services, provided that such use does not interfere with the business or mission of MCC.

MCC is a public institution: legally, email is treated the same as any other form of written communication. Messages are subjected to the same legal restrictions and potential liabilities as those of paper documents. Email messages may be subpoenaed, and are subject to the Freedom of Information Act (FOIA). MCC reserves the right, during an investigation for inappropriate use or compromised accounts, to review the messages sent or received through individual email accounts. This action can be conducted without notice. This is intended to protect the integrity of MCC’s information systems and its users against unauthorized or improper use.

Specific Guidelines
A. All users of the MCC email system are expected to conduct themselves in a legal, professional, and ethical manner. Messages that may be viewed as harassing or intimidating are prohibited.
B. MCC email shall be used in accordance with all applicable federal, state, and local laws, as well as, all other applicable MCC policies and procedures, including those pertaining to copyrighted material. Questions regarding copyrighted material should be directed to www.copyright.gov.
C. Altering, dismantling, disfiguring, or other actions intended to hide or disguise the identity of the originator of an email message is prohibited. Any attempt to read, delete, copy, or modify the messages of others is prohibited.
D. MCC email may not be used for commercial purposes, other than those that may be sanctioned by MCC.
E. Users should make every effort to protect themselves and others by keeping their anti-virus software up-to-date, and avoiding suspicious emails and attachments. It is also a good idea to only open outside messages that are from a familiar source.
F. Employees should notify their manager and contact the faculty/staff helpdesk if they think email accounts are being abused. Students who suspect email abuse are encouraged to contact the student help desk at (866)718-5170. Violations of this policy may lead to, or include, withdrawal of email privileges.

Enforcement Procedure

Students
Failure to follow acceptable standards will result in the removal of authorization and privileges to use MCC’s computer networks along with associated hardware and software as outlined in the MCC Code of Conduct.

Community Members
Failure to follow acceptable standards will result in the removal of authorization and privileges to use MCC’s computer networks.

Reinstatement of lost authorization to use MCC's Technology
When privileges are withdrawn for violation of this policy and the individual feels that he/she has been unfairly treated in the implementation of this policy, the individual may file an appeal with the Provost and Chief Student Services Officer. This will convene a meeting of the relevant parties. His/her decision will be binding.
Equal Opportunity, Harassment, and Nondiscrimination for All Faculty, Students, Employees, and Third-Parties

Commitment to Our Campus Community
Muskegon Community College (MCC) is committed to developing and sustaining a healthy and diverse learning and working environment that recognizes the value of each individual. MCC advances a safe, pleasant and respectful culture for all, free from prohibited discrimination and harassment.

EEO Statement
It is the policy of Muskegon Community College to provide equal opportunities and not discriminate in enrollment, education, employment, public accommodations, activities, or services, and the College prohibits discrimination based on the basis of age, citizenship, color, disability, ethnicity, gender identity or expression, genetic information, height, marital status, national origin, political persuasion, race, religion, sex (including the condition of pregnancy), sexual orientation, veteran status, weight, or other legally protected categories.

Classroom Speech and Content
MCC’s sexual harassment policies do not prohibit instructors from bringing relevant sexual content into their courses. It is understood that the academic setting is distinct from the typical workplace in that latitude is required in determining the appropriate content of academic material. However, speech that is not necessary to teach the material, or is objectively offensive and severe or pervasive is prohibited by College Policy and may lead to discipline.

Amnesty to MCC Student Code of Conduct to Encourage Reporting
Students who in good faith report incidents of sexual assault or other sexual violence may be granted immunity for drug and alcohol use violations provided that such violations did not or do not place the health or safety of any other person at risk. The College, may, however, initiate an educational program or discussion with the individual regarding alcohol or drug use.

Title IX Coordinator and Deputy Coordinators

Jason Cooper, (Title IX Coordinator)
Director of Compliance and Title IX Coordinator
231-777-0690, Room 1055E

Kristine Anderson, Executive Director of Human Resources
231-777-0447, Room 2109M

Marty McDermott, Dean of College Services and Athletics
231-777-0462, HWC 124A

Eli Fox, Institutional Research Analyst
231-777-0207, Room 2109V

Tonette Brown-Garner, Evening College Services Coordinator
231-777-0654, Room 1353

Seth York, Counselor
231-777-0296, Room 1050E
General Student Complaints

The General Student Complaint Form is available at: https://cm.maxient.com/reportingform.php?MuskegonCC&layout_id=4

Student complaints regarding College operations not otherwise covered in the catalog’s Petitions section should report in writing the concerns to the Provost and Chief Student Services Officer or designee. Student complaints shall not be the basis for any discipline against a supervisor, staff member, or faculty member. There are separate academic and disciplinary appeal processes and procedures to resolve academic and disciplinary issues.

The following procedures shall apply for general student complaints:

1. The Provost and Chief Student Services Officer or designee will receive a student’s verbal or written complaint. The Provost and Chief Student Services Officer or designee will consider the merit of the complaint and will take any action considered appropriate or necessary. At this level, the student has the right to remain anonymous.

2. If the student’s verbal or written complaint is not resolved to the student’s satisfaction and the student wishes to continue to pursue the complaint, the student must submit a request in writing to the Provost and Chief Student Services Officer or designee requesting further resolution. The written request must include the specific nature of the complaint, reasons for filing the complaint, and specific remedy requested. At this level, the student may no longer remain anonymous. The Provost and Chief Student Services Officer or designee will seek a resolution by contacting the appropriate College employee who is responsible for the College operation complained about and arrange a meeting between the parties involved to discuss a possible resolution. The written complaint will be forwarded to all appropriate parties involved in the conflict prior to the meeting.

3. Should resolution not be reached, the Provost and Chief Student Services Officer or designee will review the complaint and all supporting material and render a written decision regarding the complaint with rationale.

4. In the event that the Provost and Chief Student Services Officer or designee is unable to resolve the complaint, the complaint will be forwarded to the Student Services Council for review and action. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to the meeting. The student will be notified of the meeting location, date and time by the Registrar upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Student Services Council is final. No further appeal will be considered. In considering all other types of petitions/appeals, the Council reviews requests and refers students to the appropriate campus office for action. These referrals may be accompanied by the recommendation of the Council. Students may present questions.
Campus Safety and Security

In compliance with the “Jeanne Clery Disclosure of Campus Security Policy and Campus Statistics Act,” formerly known as the Crime Awareness and Campus Security Act of 1990, a guide is issued each year to provide information regarding safety and security procedures and crime statistics. Refer to our webpage at www.muskegoncc.edu/safety

If a threat to human welfare or security of personal or college property should occur, please report it to the Physical Plant office, Room 1107. For emergency situations, please dial Security at 545 on a MCC phone. Keep your vehicle locked at all times.

Crime Statistics

Muskegon Community College is a very safe place to be, as indicated by the statistics stated below. However, you need to be aware that the college is subject to many of the same problems that occur in the community in which it is located. The following information has been prepared to increase your awareness of any problems that may exist.

Refer to the Annual Safety Report page 15 on the Web for our Crime Statistics:

www.muskegoncc.edu/crime

False Alarm(s)

A false alarm entails activating the fire alarm system in any MCC building or on the property and/or reporting a fire, bomb threat or tampering with any lockdown device (i.e. The Boot) when no emergency exists. Any student making a bomb threat or reporting a false fire or lockdown alarm will be reported to law enforcement officials. Tampering with fire alarms, The Boot and related devices are a criminal offense, which may lead to criminal charges.
Weapons Policy

It is the policy of Muskegon Community College that no person employed by MCC or any student or visitor to the MCC buildings, facilities, grounds, vehicles, or other MCC property shall possess a weapon in an MCC building, on MCC grounds, during an MCC-sponsored activity, or during such times as students are under the supervision of MCC authorities.

Each student enrolled in Muskegon Community College shall abide by the terms of the MCC policy respecting a weapon-free zone.

Any student who violates the terms of this policy shall be subject to immediate removal from MCC property, and the matter shall be referred to the appropriate law enforcement agency for possible prosecution. MCC reserves the right to impose such sanctions as shall be called for by MCC administrative policies, procedures, and regulations.

This policy is not intended to apply to on or off-duty law enforcement personnel under performance of their duties, armed carriers, and others who have legal cause to carry a weapon and have the President’s permission.

First Aid and Emergencies

First aid boxes are mounted on walls in lab areas and are intended for the student’s use, when needed.

For major emergencies please call 911 first, then call security at (231) 777-0545.

For minor emergencies or any incident dealing with campus security, please call (231) 777-0545 on any MCC phone to report the incident. In case of fire, pull the nearest fire alarm and leave the building by the nearest exit. Emergency guidelines are posted around campus.

Evacuation

Due to various circumstances and emergencies, the buildings at MCC may need to be evacuated. This could occur with the sounding of a fire alarm bell or by someone alerting your instructor in the classroom. Under any circumstances, we ask that you leave the building(s) immediately and in an orderly fashion utilizing exits to the exterior of the buildings. You may need to reference your emergency evacuation maps and/or locations for evacuation points. Please take all of your personal belongings with you upon evacuation.

School Closing

When an emergency situation necessitates the closing of one or more of the MCC campus locations, MCC will disseminate an emergency message across various communication vehicles. These modes of communication include: RAVE Mobile Safety alert text messages sent to the mobile phones of MCC students and employees who have registered at www.muskegoncc.edu/rave; announcements on West Michigan television and radio outlets via the GRAIL web system; as well as messages on the MCC web home page, the MyMCC Portal, campus e-mail, the MCC Facebook page, and on the main campus phone. All announcements should be noted carefully in as much as only morning, afternoon, or evening classes may be canceled.

The canceling of on-campus classes may not affect off-campus classes. Muskegon Community College classes taught off-campus will be canceled based upon cancellation of classes by individual schools. (i.e., Grand Haven, Fremont, etc.)

Severe Weather

When warned of a tornado or other severe weather conditions, staff and students should proceed to sheltered areas outlined on the severe weather poster which is posted in most rooms on campus. No one should leave the building under these circumstances.
Drug-free Campus

Muskegon Community College complies with federal, state, and local laws including those which regulate the possession, use, and sale of alcoholic beverages and controlled substances. The following represents the drug alcohol policies of MCC.

In compliance with the Board of Trustees’ policies 4.02.00 and 5.20.00 and the Drug-free Schools and Communities Act Amendments of 1989, the following represent the Drug-free Workplace Regulations of MCC:

- Students and guests may not manufacture, distribute, dispense, possess, or use alcoholic beverages on MCC premises.
- Students and guests may not unlawfully possess, use, or distribute controlled substances and alcohol on MCC premises or while engaged in MCC activities such as conferences or field trips.
- Being under the influence of alcohol or any controlled substance while on MCC premises or engaged in MCC activities is prohibited.
- Students and guests are personally accountable for having knowledge of federal, state, and local laws relating to alcoholic beverages and controlled substances, the minimum drinking age, the transportation of open containers of alcoholic beverages, and the false representation of age by a minor.
- Student employees of MCC shall comply with the terms of this policy. Violation of such policy may result in disciplinary action, up to and including termination of employment and referral for prosecution. Any sanctions imposed will be consistent with local, state, and federal law.
- Student employees are required to notify MCC of any criminal conviction for a violation of the policy occurring in the workplace no later than five days after such conviction.

Violation of this policy by students may result in disciplinary action of up to, and including, suspension or expulsion from MCC and referral for prosecution. All guests on campus are expected to follow the above requirements. Failure to do so may result in a request to leave the MCC property or an MCC activity.

Tobacco/E-Cigarette Free Environment

Muskegon Community College is committed to the health, comfort, and safety of students, employees and the general public, thereby, minimizing the harmful effects and discomfort smoking produces in the workplace. In compliance with Federal and State laws, fire regulations, and Board of Trustees policy, the use, distribution or sale of tobacco, electronic cigarettes (e-cigarette) in addition to the possession, use or smoking of medical marijuana is prohibited in college buildings, extension centers, on college premises and in vehicles owned, rented or leased by the college. If College facilities are rented by non-College individuals or groups, they and their participants/guest shall be required to comply with this policy. Muskegon Community College will offer and promote programs and services that include practical evidence-based approaches to decrease or stop tobacco use for students and employees.

Dress Code

There is no formal dress code. However, students whose dress is obviously inappropriate may be asked to leave the campus. Shoes should be worn in the buildings. Certain classes may mandate specific articles of clothing to meet safety standards.
Student Conduct Policies

To view the entire policy, visit:
www.muskegoncc.edu/conduct

Freedom of Expression

MCC is an institution that believes in the freedom of expression, freedom of speech and right to peaceably assemble. People or groups are supported when exercising these freedoms when on our grounds. The purpose of this policy is to facilitate expressive activities while ensuring that such activities do not interfere with College operations and the learning environment.

For anyone lawfully present on the College’s campuses, the outdoor common areas are designated as venues for free expression, including spontaneous expression, speeches, demonstrations and distribution of information. Anyone who wishes to engage in commercial solicitation is required to reserve time and space for such activities following the terms of this policy.

For purposes of this policy, the term “expressive activity” includes such activities as:

• Group activities;
• Speeches, performances, demonstrations, parades, marches, rallies, vigils and other events;
• Distributions of informational materials, such as circulars, newspapers, leaflets and pamphlets;
• Any other expression, including spontaneous expression, protected by the First Amendment to the U.S. Constitution.

MCC maintains its authority to regulate the time, place and manner of expressive activities, it shall not consider or regulate the content or viewpoint of expressive activities when enforcing this policy, including by restricting students’ expression based on concerns about other person(s)’ negative reaction to that expression. MCC will work to ensure that expressive activities transpire without interference by the College, provided the learning environment is not substantially and materially disrupted and campus safety is not compromised by the expressive activities. If persons react negatively to expressive activities occurring on campus, the College will take necessary steps to ensure campus safety while allowing the expressive activity to continue, unless the College’s operations are materially and substantially disrupted.

For purposes of this policy, the term “outdoor common” refers to such areas as:
• Lawns, sidewalks, benches and other outdoor areas that are not otherwise reserved for use.

For purposes of this policy, the peaceful distribution of informational materials in the outdoor common areas does not, without more, represent a substantial or material disruption to the learning environment at the College.

Expressive activities, as defined by this policy, are allowed on campus during the periods that College facilities are open to the general public.

No expressive activity at MCC shall be permitted to:
• Violate or infringe upon the rights of others;
• Falsely defame an individual;
• Constitute a genuine threat or harassment;
• Invade privacy or confidentiality interests;
• Block access to campus buildings;
• Impede entry or exit to the College or any College property, pedestrian pathway, parking lot, building, facility or event;
• Obstruct vehicle or pedestrian traffic;
• Include the use of audio amplification devices, unless specifically authorized by the College;
• Include the use of fire or pyrotechnics, unless specifically authorized by the College;
• Affix materials to College buildings, equipment, fences, trees or property, unless specifically authorized by the College.

MCC does not assume any obligation or responsibility for the content of expressive activities or materials distributed. People engaging in expressive activities assume responsibility for damages to College property, for the cleanup of materials immediately following the conclusion of expressive activities and for remaining in compliance with applicable local, state and federal laws.
Muskegon Community College Equal Opportunity, Harassment, and Nondiscrimination Policy

Muskegon Community College is committed to providing a workplace and educational environment, as well as other benefits, programs, and activities, that are free from discrimination, harassment, and retaliation. To ensure compliance with federal and state civil rights laws and regulations, and to affirm its commitment to promoting the goals of fairness and equity in all aspects of the educational program or activity, Muskegon Community College has developed internal policies and procedures that provide a prompt, fair, and impartial process for those involved in an allegation of discrimination or harassment on the basis of protected class status, and for allegations of retaliation. Muskegon Community College values and upholds the equal dignity of all members of its community and strives to balance the rights of the parties in the grievance process during what is often a difficult time for all those involved.
