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Learn more at minnesota.edu
Minnesota State Community and Technical College is committed to a policy of nondiscrimination in employment and education opportunity. No person shall be discriminated against in the terms and conditions of employment, personnel practices or access to and participation in programs, services and activities with regard to race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, gender identity or gender expression or membership or activity in a local commission as defined by law. Inquiries regarding compliance, rights and other information may be addressed to Affirmative Action Officer Doug Andring, 1900 28th Avenue South, Moorhead, MN 56560, Office E113, 218.299.6870, fax: 218.299.6513. Inquiries regarding the education opportunities or equal employment policies of the Affirmative Action program should be directed to:

**Minnesota State Community and Technical College**
Compliance Officer
Doug Andring
1900 28th Avenue South
Office E113
Moorhead, MN 56560
Telephone: 218.299.6870
Fax: 218.299.6513
Email: doug.andring@minnesota.edu

**Office for Civil Rights**
U.S. Department of Health and Human Services
233 N. Michigan Ave., Suite 240
Chicago, IL 60601
Telephone: 800.368.1019
Fax: 312.886.1807
TDD: 800.537.7697
Email: OCRMail@hhs.gov

**Office for Civil Rights**
U.S. Department of Health and Human Services
200 Independence Avenue SW
Room 509F HHH Bldg.
Washington, D.C. 20201
Telephone: 1.800.421.3481
Fax: 202.205.9862
TDD: 877.521.2172
Email: OCRMail@hhs.gov

Printed copies of the campus drug-free policy, security policy, athletic gender equity policy, and student right to know are available by contacting: Student Services Office; Minnesota State Community and Technical College; 1414 College Way; Fergus Falls, MN 56537-1000; 218.736.1500.

Minnesota State Community and Technical College is accredited by the Higher Learning Commission; Member of the North Central Association (NCA), with additional program-specific accreditation information found in the M State Catalog. Information about NCA can be found on its website at www.ncahlc.org or by writing to the association at 230 South LaSalle Street, Suite 7-500; Chicago, IL 60604; telephone 800.621.7440.

Information contained in this Catalog is periodically updated from time to time without notice. None of the information contained in this Catalog should be regarded as contractual in nature. Data contained in this Catalog is thought to accurately reflect information available at the time of publication (Fall Semester). However, Minnesota State Community and Technical College reserves the right to make substantial changes in curricula, course content and goals, procedures, policies, program requirements and tuition rates/costs at any time deemed necessary between editions. All revisions will take priority over the contents of this edition.

To reach M State with a TTY, contact the Minnesota Relay Service at 651.297.5353 or 1.800.627.3529 and ask to have a call placed to the college. Upon request this information will be made available in alternate formats.

**MINNESOTA STATE**
A member of the Minnesota State system. An Equal Opportunity/Affirmative Action/Veterans/Disability employer/educator committed to the principles of diversity.

The purpose of the Catalog is to provide students, advisors, counselors, faculty and college administration a convenient vehicle for viewing information about M State’s programs and courses. While M State is committed to communicating in a timely and accurate manner, it is important for all Catalog users to understand that this publication is not intended to create any guarantees about current program/course offerings. M State reserves the right to change or vary the content of this publication, without notice to current or potential users, when in its sole discretion such changes, updates or variations are warranted. It is the user’s responsibility to seek clarification and/or assistance from a college advisor or administrator regarding any content questions. The most current publication of M State’s Online Catalog supersedes all prior print or online publications and can be found by visiting our website at www.minnesota.edu.
Welcome to Minnesota State Community and Technical College!

Minnesota State Community and Technical College has campuses in Detroit Lakes, Fergus Falls, Moorhead and Wadena, and an online program that offers numerous opportunities to *discover your future*. Whether you are interested in career and technical training, academic transfer education, advancing in your existing career or just enriching your life and personal interests, M State can meet your professional and personal learning needs. M State serves nearly 8,000 students each year, so we offer large college advantages with a small college feel.

There is something for everyone at M State, and I invite you to visit any of our campuses or our website at minnesota.edu to explore the many pathways open to you. You will find caring and helpful student services staff ready to assist you — be sure to stop by one of our campus Spartan Centers for help with studying, developing a resume, practicing your interviewing skills, getting a job or transferring to a university. Be sure to engage with our experienced faculty who are experts in their fields of study and discipline — you’ll get extra attention with our smaller class sizes. Everyone on campus is eager to assist you in meeting your educational, career and transfer goals, so be sure to take advantage of that.

Your success is our priority, and we are focusing on realizing what we do extremely well, reconnecting with our stakeholders to determine what we can do better and redesigning what we offer to achieve more for you, for the regional workforce and for our communities.

On behalf of our faculty, staff and administrators, I want to thank you for considering M State as your educational partner and pathway to a bright future. We look forward to meeting and working with you to help you reach your career and transfer goals.

Best wishes for success with your college plans and your personal goals. Remember, your success is our vision!

Peggy D. Kennedy, Ed.D.
President

minnesota.edu
Detroit Lakes

**Academic and Student Services**

<table>
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<tr>
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<tr>
<td>Academic Dean</td>
<td>218.846.3723</td>
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<tr>
<td>Campus Director of Student Services</td>
<td>218.846.3714</td>
</tr>
<tr>
<td>Dean of Student Success</td>
<td>218.299.6535</td>
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<tr>
<td>Support Center</td>
<td>877.450.3322</td>
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<tr>
<td>Vice President/Chief Academic Officer</td>
<td>218.736.1504</td>
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<tr>
<td>Vice President/Chief Student Development Officer</td>
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<td>Academic Advising</td>
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<tr>
<td>Assessments/Accuplacer</td>
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<td>Bookstore</td>
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<td>Child Care</td>
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<td>Library</td>
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<td>Student Life</td>
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<tr>
<td>Social Worker, Resources and Referrals</td>
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<td>Spartan Center/Tutoring</td>
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**Fergus Falls**

**Academic and Student Services**

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<td>Support Center</td>
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<td>Vice President/Chief Academic Officer</td>
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<td>Vice President/Chief Student Development Officer</td>
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<td>Box Office/Fine Arts</td>
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Directory of College Services

Information .................................................. 218.736.1533
Library .......................................................... 218.736.1650
Multicultural Services/
Diversity and Inclusion ................................. 218.736.1512
Security ........................................................ 218.770.9861
Student Life ..................................................... 218.736.1537
Learning Center/Tutoring .................................. 218.736.1624
Student Records .............................................. 218.736.1529
Veterans Services .............................................. 218.299.6881

Counseling...................................................... 218.299.6618
Disability Services ................................. 218.299.6882
Enrollment ...................................................... 877.450.3322
Facilities ........................................................ 218.299.6522
Financial Aid .............................................. 218.299.6511
Foundation .................................................. 218.299.6826
Information .................................................... 218.299.6500
Library .......................................................... 218.299.6530
Multicultural Services/
Diversity and Inclusion ................................. 218.736.1512
Student Life ..................................................... 218.299.6529
Learning Center/Tutoring .................................. 218.299.6882
Student Records .............................................. 218.299.6593
Veterans Services .............................................. 218.299.6925

Moorhead

Academic and Student Services

Academic Dean/Liberal Arts .................. 218.299.6544
Academic Dean/Career and Technical .... 218.299.6594
Academic Dean/Health Careers .......... 218.846.3866
Campus Director of Student Services .... 218.299.6620
Dean of Academic Quality and Support .... 218.299.6853
Dean of Student Success ..................... 218.299.6535
Support Center ............................................. 877.450.3322
Vice President/Chief Academic Officer..... 218.736.1504
Vice President/Chief Student Development Officer .... 218.631.7810

Academic Advising ........................................ 218.299.6880
Assessments/Accuplacer ...................... 877.450.3322
Bookstore ..................................................... 218.299.6570
Computer Help Center ......................... 218.299.6568

Wadena

Academic and Student Services

Academic Dean .................. 218.631.7812 / 218.631.7936
Campus Director of Student Services .... 218.631.7832
Dean of Student Success ..................... 218.299.6535
Support Center ............................................. 877.450.3322
Vice President/Chief Academic Officer ..... 218.736.1504
Vice President/Chief Student Development Officer .... 218.631.7810

Academic Advising ........................................ 218.631.7827
Assessments/Accuplacer ...................... 218.631.7818
MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE

Directory of College Services

Bookstore............................................. 218.631.7825
Child Care ............................................. 218.632.2348
Disability Services ......................... 218.631.7832
English Language Learner .................. 218.632.2450
Enrollment ............................................. 218.631.7818
Facilities ............................................... 218.631.7906
Financial Aid ......................................... 218.736.1534
Foundation ............................................. 218.631.7931
Information ........................................... 218.631.7821
Computer Help Center ...................... 218.631.7873
Library .................................................. 218.631.7865
Student Life ............................................ 218.631.7827
Learning Center/Tutoring ................... 218.631.7870
Student Records and Transcripts ........... 218.631.7819
Veterans Services ................................. 218.299.6881

K12 Collaborations

Career Articulation Agreements .............. 218.846.3867
Concurrent Enrollment .......................... 218.846.3867
eCampus in the High School .................. 218.846.3867
Vision
A success story for every student and stakeholder.

Mission
Provide dynamic learning for living, working and serving.
*M State’s mission is to provide accessible education with vigor and integrity to diverse learners, preparing them for dynamic living, working and serving.*

Strategic Goals
Aligned with the Strategic Framework of the Minnesota State Colleges and Universities System

Ensure access to an extraordinary education for all Minnesotans
*M State embraces the challenge to excel in teaching, learning and service so all students — career, transfer and life-long learners — are ensured of opportunities for success.*

Be a partner of choice to meet Minnesota’s workforce and community needs
*M State recognizes its role as partner and leader in preparing our students, the region and the state for current and future economic competitiveness in a global market.*

Deliver to students, employers, communities and taxpayers the highest value and most affordable option for higher education
*M State uses sound financial management practices and continually assesses how to productively meet current and future educational needs through innovation, efficiencies and shared services.*

Values
*M State is focused on excellence, integrity, respect and innovation.*

- Excellence in teaching and service
- An environment conducive to learning and working
- A culture of diversity and inclusiveness
- Responsiveness to communities served
- Respect and civility in communications
- Openness to innovation and change
- Accountability and transparency in decision-making
About the Campus

The Detroit Lakes campus, with a total enrollment of 1075, offers students degrees in a range of fields, including business, design, early childhood education, engineering, health care, information technology, transportation and transfer. The campus offers unique programs including PowerSports Technology and Marine Engine Technology – both fitting for a campus in the heart of Minnesota lakes country. Additional programs prepare students for high demand careers in architectural drafting, CISCO, civil engineering technology, nursing, and radiologic technology. Small class sizes, flexible delivery, and an understanding of your prior learning experience creates a more personal education. A structured, cohort-based transfer program prepares students for an easy transition to a four-year college or university. The Workforce Development Solutions division provides customers with consulting, assessment, education and customized training services. The campus provides food service, child care, student organizations, a veteran’s resource center, and support services to promote academic success. Housing options are available near the campus. Scholarship opportunities available through the M State Foundation and Alumni.

About the Community

Detroit Lakes is located just 40 minutes east of Fargo-Moorhead in beautiful Minnesota lake country. With the combination of adjacent prairie, abundant woodlands, and 412 lakes within a 25-mile radius, it makes an ideal place to live and work. In addition to the wonderful setting, Detroit Lakes features a top-rated school system, excellent medical facilities, and numerous park and recreational facilities. Our economic base has an entrepreneurial spirit that is solid and stable with a good mix of manufacturing, tourism, agriculture and retail. Residents and visitors enjoy Detroit Lakes for Northwest Water Carnival, WE Fest Country Music Festival, the Pine to Palm Golf Tournament and the Polar Fest, averaging one special event per week throughout the year. The Detroit Lakes Cultural & Community Center features opportunities for swimming, physical activities, including two gyms and an 800 seat theatre for cultural events. In addition to the golf courses and our famous mile long City beach, Detroit Mountain Recreation Area offers mountain biking, hiking, downhill and cross-country skiing, and an amazing lodge.

About the Campus

The Fergus Falls campus, with a total enrollment of approximately 750, has been providing high-quality academic programs in the liberal arts and earth sciences for more than 55 years. Degree options include Associate in Arts, Associate in Fine Arts in Music, Theater and Visual Arts, Associate of Science in Accounting and Business, Biological Sciences, Chemistry, Environmental Science, Medical Laboratory Technology, Nursing and a diploma and AAS in Equine Science and Business. The college is recognized for its rich tradition in the arts, music and athletics. Varsity athletic teams compete in the National JuniorCollege Athletic Association and the Minnesota College Athletic Conference in eight sports: football, volleyball, men’s and women’s golf and basketball, baseball and softball. Visitors are amazed by the extensive art collection displayed across the campus, making art an everyday part of the student experience. The music program is renowned for both vocal and instrumental excellence, and student musicians enjoy multiple chorus and instrumental rehearsal rooms, along with computers and software for music composition. The campus offers food service for on-campus residential program and many scholarship opportunities through Fergus Area College Foundation, which has an endowment of over $5 million.

About the Community

Fergus Falls is located in west central Minnesota, less than three hours from Minneapolis-St. Paul and an hour from the Fargo-Moorhead metropolitan area. The city of 14,000 is home to an active arts community and has a wide array of outdoor recreational opportunities, including the trailhead of the 55-mile Central Lakes Trail for bikers and snowmobilers. With more than 1,000 lakes in Otter Tail County, there is no shortage of outdoor and water activities. A Center for the Arts and the Kaddatz Galleries, both located in downtown Fergus Falls, are venues for theater, concerts, independent films and rotating art exhibits. Otter Tail Power Company has its headquarters in Fergus Falls, and the city is a regionally-recognized health care provider through Lake Region Healthcare and new Cancer Care and Research Center.
About the Campus

The Moorhead campus is a vibrant, comprehensive community and technical college, offering in-demand technical/career programs and liberal arts and sciences to 2,928 enrolled students. Students have the option of completing Associate in Science transfer degrees in Accounting, Biological Sciences, Business, Chemistry, Criminal Justice, Engineering, Environmental Science, Human Resources, Information Technology and Nursing or an Associate in Arts transfer degree with the intent of earning a bachelor’s degree or beyond. Innovative programs allow students to prepare for careers in exciting and expanding sectors including transportation, construction trades, human services, graphic and mechanical design, business and health. Industry sponsorships provide students in the transportation, construction trades and health career areas with the opportunity to combine work and school in a synergistic approach giving students needed skills and industry qualified workers. The Moorhead campus proudly supports one of the area’s most extensive and robust art collections. Food service is created by the Culinary Arts students. Academic and technical skill competitions such as SkillsUSA provide opportunities for students to compete on a national level. M State - Moorhead Campus students have a history of placing in the top 15 regionally and the top 10 nationally. Student services supports students with financing, tutoring, academic advising, counseling and a myriad of opportunities for success. Scholarships abound through Moorhead Community and Technical College Foundation.

About the Community

The Fargo-Moorhead metro area, with a population of 228,300, is a college town, small enough to feel comfortable yet offering all the benefits of a larger metropolitan area with its cultural, sports, recreational and commercial diversity. Arts and culture flourish, where local talent supports a community theater, symphony and civic opera company. The cities boast numerous parks, bike trails, ice facilities, playgrounds, swimming pools, ball diamonds, cross country ski trails and golf courses. The business community is thriving as a center for agribusiness, marketing, technology, research, health and construction in the heart of the Red River Valley. The metropolitan area is a regionally recognized health care provider whose members are in the process of constructing a state-of-the-art hospital complex.

About the Campus

The Wadena campus, with a total enrollment of 495, offers degrees in a range of fields, including health care, cosmetology, and electrical line worker. Small class sizes mean a more personal education, and most programs offer the kind of hands-on classroom and real-life experiences that are ideal for preparing students for careers. Strong interest in its highly regarded Electrical Line Worker program recently prompted the college to open a satellite site for the program in Baudette, on the Canadian border. Students also can earn an Associate in Arts degree, a springboard for continuing education at a four-year college or university. The campus provides food service, student organizations and support services to promote academic success. Housing options are available near the campus.

About the Community

The welcoming community of Wadena, with a population of 4,500, is located at the gateway of Minnesota lake country. It offers many opportunities for outdoor recreation with 1,000 lakes within 50 miles and more than 300 acres of parks that provide opportunities for cross-country skiing, snowmobiling, canoeing, biking, hunting, golfing, in-line skating, horseback riding and fishing. The city serves as a regional trade center for area communities and has a small-town atmosphere with the attractions of a larger community.
## 2017-2018 M State Student Academic Calendar

### AUGUST 2017
- **August 21**: Fall semester begins
- **August 23**: Last day to add courses for fall semester
- **August 25**: Last day to drop courses for fall semester

### SEPTEMBER 2017
- **September 4**: Labor Day **COLLEGE CLOSED**
- **September 15**: Application deadline for fall commencement ceremony
- **September 15**: Constitution Day observed
- **September 26**: No Classes/College Open

### OCTOBER 2017
- **October 16**: Spring 2018 registration begins
- **October 19-20**: Fall break **No Classes/College Open**

### NOVEMBER 2017
- **November 10**: Veterans Day Observed **COLLEGE CLOSED**
- **November 22**: Last day to withdraw from full-term fall semester courses
- **November 23-24**: Thanksgiving break **COLLEGE CLOSED**

### DECEMBER 2017
- **December 11-15**: Final exams
- **December 15**: Fall commencement for all campuses; ceremony in Moorhead
- **December 15**: Fall semester ends
- **December 18-January 5**: Semester break **No Classes/College Open**
- **December 25**: Christmas **COLLEGE CLOSED**

### JANUARY 2018
- **January 1**: New Year’s Day **COLLEGE CLOSED**
- **January 8**: Spring semester begins
- **January 10**: Last day to add courses for spring semester
- **January 12**: Last day to drop courses for spring semester
- **January 15**: Martin Luther King Jr. Day **COLLEGE CLOSED**

### FEBRUARY 2018
- **February 2**: Application deadline for spring graduates/spring commencement ceremony
- **February 19**: Presidents Day **COLLEGE CLOSED**
- **February 20**: No Classes/College Open

### MARCH 2018
- **March 5**: Summer/fall 2018 registration opens
- **March 9**: Application deadline for summer graduates/spring commencement ceremony
- **March 12-16**: Spring break **No Classes/College Open**

### APRIL 2018
- **April 11**: Last day to withdraw from full-term spring semester courses
- **April 30-May 4**: Final exams

### MAY 2018
- **May 2**: Detroit Lakes campus commencement
- **May 3**: Fergus Falls campus commencement
- **May 4**: Wadena campus commencement
- **May 4**: Spring semester ends
- **May 8**: Moorhead campus commencement
- **May 9**: Summer term begins
- **May 28**: Memorial Day **COLLEGE CLOSED**

### JUNE 2018
- **June 4**: Independence Day **COLLEGE CLOSED**
- **July 4**: Independence Day **COLLEGE CLOSED**
- **July 27**: Summer term ends

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Visit minnesota.edu/calendar for more information.
About Us

Minnesota State Community and Technical College is a member of the Minnesota State Colleges and Universities system. M State serves more than 8,400 students in credit courses each year in more than 70 career and liberal arts programs online and at its four campuses in Detroit Lakes, Fergus Falls, Moorhead and Wadena.

M State was created July 1, 2003, by the merger of Fergus Falls Community College and three campuses of Northwest Technical College. This new college was developed to better serve the needs of the communities in west central Minnesota and the Red River Valley through a combination of strong technical programs and comprehensive community college curriculum. M State currently has more than 538 employees across Minnesota.

Each of the campuses has been meeting the educational and workforce needs of its community for a half century or more. The Fergus Falls campus was established in 1960 thanks to the initiative of community leaders determined to create a community college where area students could complete the first two years of a four-year degree. The Detroit Lakes, Moorhead and Wadena campuses were established when state leaders recognized the need to provide technical education and training to meet workforce demands. Wadena was founded in 1959, Moorhead in 1965 and Detroit Lakes in 1966. True to the goal of meeting workforce needs, each campus has added and enhanced programs as demands have changed. All four campuses now offer blends of occupational programming and access to a liberal arts and science curriculum.

Healthy Enrollment

M State has maintained healthy enrollment by expanding online classes and programs and workforce development options. Workforce Development Solutions staff work closely with each of our communities to meet the ever-changing needs of local businesses and industries, which has resulted in the growth of site-based workplace training in business and industry. Through collaborative community efforts and business partnerships, the college provided workforce development services and other responsive training programs to more than 5,400 people in Fiscal Year 2016.
Success of Graduates

Student success is measured by factors including student persistence, program completion, graduation and transfer rates, and pass rates for licensure exams. M State’s student persistence rate for first-time students has risen by 4 percentage points during the most recent three years. In 2014 M State’s Nursing and Radiologic Technology graduates had a combined average pass rate of 92 percent on licensure exams, and in 2015 Nursing licensure pass rates were among the highest in the state and well above the national average. The number of graduates was up slightly in 2016 compared to 2015, with 1,355 graduates compared to 1,340 in 2015.

Fall-to-Fall Persistence Rate (All First-Time Students)

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Fall-to-Spring Persistence Rate (All First-Time Students)

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<td>F15 - S16</td>
<td>74%</td>
</tr>
</tbody>
</table>

Serving a Diverse Student Population

M State is in the business of changing lives, and we have the privilege of serving and educating a diverse student population. Every student who walks in our doors, meets our instructors in their place of employment or logs in to our virtual classrooms has a story. The diversity of their stories is represented in our student demographics. In 2016, 14 percent of our students were of an ethnic background other than Caucasian/white, 36 percent had high financial need and 17 percent were first-generation students.

Affordable Education

We provide a cost-effective higher education option for our stakeholders by focusing on stabilizing tuition rates and aggressively monitoring our spending and assets. Following a two-year tuition freeze that began in 2013, a 1 percent tuition reduction was approved by the Minnesota State Board of Trustees for the 2016-2017 academic year. This appropriation of state funds by the Legislature further enabled M State to strengthen our commitment to provide assessable education for students.

2016-2017 In-State Tuition and Fees Comparison

The Tuition and Fees Comparison chart compares tuition rates for full-time students who are state residents.

Source: College Navigator (National Center for Education Statistics)
K-12 Collaborations

M State has a strong history of working collaboratively with high schools and other educational institutions within our region.

- M State has partnered with high schools to offer concurrent courses to high school students since 1985. During the 2015-16 academic year, M State reached more than 1,600 students with over 250 offerings at 37 partner high schools.

- M State was the lead institution in the development of an initiative to bring online dual credit college courses to high school students in rural schools throughout the state and continues to offer this option through eCampus in the High School, which serves more than 100 students each academic term.

Through these combined efforts, M State works collaboratively with more than 60 Minnesota high school partners to provide credit-based offerings and college and career preparation services.

M State Partners with Regional Educators

M State has successful partnerships with other colleges and universities in the region, including membership in the Tri-College University partnership and through the up2U scholarship program for students transferring to Concordia, Minnesota State University Moorhead and St. Cloud State University. M State partners with Central Lakes College and Rural Minnesota CEP for the Bridges, Career Advisor and Technology Mobile programs, which all are designed to provide secondary students with opportunities to learn about college programs and career options. In addition, strong partnerships with our regional educational service cooperatives, Lakes Country Service Cooperative and the National Joint Powers Alliance, help us to work collectively to enhance educational opportunities for diverse stakeholders.

Financial Outlook

Stakeholder support of the college is more critical than ever due to significant changes in revenue and funding sources in the past few years. M State remains committed to informed financial planning and a shared vision for the continued efficient use of financial resources so that it can continue to be an affordable educational option for students.

Accreditation

M State is accredited by the Higher Learning Commission: Member of the North Central Association (1972-present). M State was admitted into the HLC’s Academic Quality Improvement Program (AQIP) in 2009. The college has numerous career/technical programs that are additionally accredited by boards, agencies, commissions or professional organizations in specific fields or disciplines.

HLC AQIP website: www.hlcommission.org/Pathways/aqip-home.html
HLC website: www.ncahigherlearningcommission.org
Program accreditation information: www.minnesota.edu/accreditation

Our Mission
Provide dynamic learning for living, working and serving.

Our Vision
A success story for every student and stakeholder.
Points of Pride

Instructors are Recognized for Quality

M State faculty members do an outstanding job of providing our students with a quality education; their accomplishments are recognized in a number of ways each year. Two of the most prestigious teaching awards are given through a peer nomination and portfolio process for the National Institute for Staff and Organizational Development and through the System Office Excellence in Teaching award. Faculty are nominated by students, faculty peers or staff, with their selection based on teaching strategies and materials; content expertise; service to students, their profession, their institution and the system; and assessment of student learning and performance.

Employment of Graduates

Not only is M State committed to educating our communities, we are invested in them! From 2010 to 2015, M State has assisted in educating more than 9,000 graduates available for employment in their fields of study. The college’s career and technical programs options boast vigorous advisory committees, and supportive sponsorships and scholarship opportunities. Last year, a large majority of our graduates successfully transferred to universities or found employment with nearly 400 employers in the M State region.

Federal Grants

M State currently manages two federal grants totaling more than $4.7 million. Over the next three years, the U.S. Department of Labor TAAACCCT Grant will continue to support the ongoing training of more than 400 west central Minnesota residents for careers in construction and utilities. The U.S. Department of Education Title III Grant supports institutional improvements in business efficiencies, faculty development and student development.

In addition, the college is a state grantee of a federal Partnership for Success grant that focuses on preventing underage drinking and drug use through the implementation of research-based prevention strategies.

Focus on Workforce Development and Industry Partnerships

M State is committed to partnering with business and industry to provide high-quality innovative programs to support the economic needs of the region. More than 500 business and industry representatives serve on our program advisory committees. We have 44 career and technical programs that may be completed in one year or less and offer a variety of ways to deliver programs that prepare students for the workplace, including mobile training labs and classrooms, telepresence offerings, and online and blended courses and programs. The college has developed new programs in direct response to industry needs, including Supervisory Leadership Essentials, Industrial Workplace Readiness, and Business and Banking. M State is proud to have successfully launched a workplace readiness English Language Learner course to assist New Americans in the workplace.

Foundation Scholarships

M State is proud to serve each of its communities and is committed to providing affordable, accessible education. Through the support of the four M State campus foundations, their dedicated boards of directors and donors, 423 M State students were awarded more than $415,000 in scholarships in 2016.

Student Life

Student life opportunities at M State focus on engaging students outside of the classroom in active learning, helping students develop coherent values and ethical standards, communicating high expectations for student learning, effectively using resources to achieve institutional missions and goals, forging educational partnerships which advance student learning, and building supportive and inclusive communities. M State has vocal and performance fine arts opportunities, athletics and a large number of student clubs and organizations.
Start at M State!

Transfer degrees that will save you $$ on your way to NDSU, UND, MSUM, Concordia or anywhere.

The smart start to your four-year degree.

Master's-level or higher instructors.

On campus and/or online.

Full time or part time.

Start M State. Go anywhere.
About WDS
Workforce Development Solutions supports business and industry growth in Minnesota. For more than 25 years we have worked with companies to help them expand and become more efficient and to develop a skilled workforce.

Service Area
WDS provides skills and technology training for individuals and organizations in the communities of Detroit Lakes, Fergus Falls, Moorhead and Wadena, as well as the surrounding areas of west central Minnesota and eastern North Dakota. Training is available on-site, at a campus or online. WDS serves approximately 5,500 students annually, providing more than 97,000 hours of training. We have worked with more than 500 companies in Minnesota and Eastern North Dakota to offer contract training or enrolled their workers in open enrollment classes.

Flexible Hour-Based and Credit Options
WDS offers both hour-based and credit courses. Hour-based training usually focuses on a specific training or production need within a company. To develop the internal workforce for new responsibilities and advancement, companies often use credit courses and degree programs. Credit courses are considered to be a key workforce recruitment and retention tool.

Research and Development
Although our primary focus is the incumbent workforce, WDS also serves as the research and development arm of the college. Because WDS staff members are in daily contact with businesses and economic developers, they are in a position to continuously feed information back to the college. WDS develops new programs for businesses that can be offered on the campuses, secures new equipment through grants and serves as an industry connection to the campuses.

Targeted Products and Services
- Business Technology
- Electrical
- Health and Emergency Services
- Leadership Development
- Mechanical/Technical
- Safety and Compliance
- Transportation

Training products can be customized to fit a particular business need or, in some cases, new products can be developed to meet a new technology or strategic focus. Products and services offered through each area of expertise include:

Fire and Rescue
- Confined Space Rescue
- Hazardous Materials
- Live Fire Training
- National Fire Academy Courses
- NFPA 1001 Firefighter I and II
- NFPA 1670 Technical Rescue Training
- OSHA Required Courses
- Tactics and Strategies Courses

Health
- Continuing Education for Nurses, Social Workers and Dental Professionals
- CPR and First Aid Training
- LPN Lean Leadership Training
- Medication Administration for School Personnel
- Medication Administration for Unlicensed Personnel (MN)
- Medication Administration II (ND)
- Minnesota Cosmetology Continuing Education 4-hour Renewal Course
- Nursing Assistant Training
- Nursing Assistant/Home Health Aide Testing
- Refresher Courses State Certification Test Review
- RN and LPN Nurse Refresher Courses

Leadership Development
- Behavioral Expectations and Interviewing Skills
- Bullying in the Workplace
- Conducting Performance Appraisals
- Customer Service
- Dealing with Difficult People
- Diversity/Culture Change/Generation Gap
- Facilitating Lean Projects
- Franklin Covey Opportunities
- Human Resources Aids
- Interpersonal Skills
- Leadership Management
- Lean Implementation
- Making the Most of Change in the Workplace
- Sales Effectiveness
- Selling Services in a Product World
- Social Media
• Software Applications (Basic to Advanced)
• Strengths Finder
• Stress in the Workplace
• Train-the-Trainer

Mechanical/Technical
• AutoCAD
• Automation
• Basic and Advanced Manufacturing Technologies
• Basic Technical Skills
• BICSI Installer and Technician Level Training
• Blueprint Reading
• Continuous Improvement
• Data Communications
• Electrical Continuing Education
• Electrical Troubleshooting
• Electronics
• Fiber Optics
• HVAC
• ISO 9001
• LEAN
• MIG and TIG Welding
• Mechanical / Industrial Maintenance
• Power Limited and Test Preparation
• Precision Machining
• Project Management
• Quality
• Sanitation ServSafe
• Statistical Process Control
• Steam Plant Engineering/Boiler
• Telecommunications
• Technical Problem Solving
• Test Equipment

Safety and Compliance
• Fall Protection
• Forklift/Powered Industrial Vehicle Operator Training
• Forklift Train-the-Trainer
• HazComm/Right-to-know
• HazMat
• HAZWOPER
• Lanyard/Harness
• Lockout-Tagout
• Machine Guarding
• MSHA Part 46 and 48 – New Miner and Annual Refresher Training
• NFPA 70E Arc Flash
• OSHA 10/30 Construction
• OSHA 10/30 General Industry
• Personal Protective Equipment (PPE)
• Pilot/Escort Driver Certification Training
• Rigging/Hoisting
• Scaffolding
• Trenching and Excavation
• Workplace Violence

Transportation
• CDL Training
• MN Commercial Vehicle Inspection Recertification
• Motorcycle and Moped Safety
• Motorcycle Road Guard Certification

High-Quality Trainers, Instructors and Consultants
WDS uses a network of dozens of full-time, adjunct and contract instructors and consultants. Business and industry experience is considered essential, and instructors have varied practical and instructional experiences.

Convenient On-Site and Campus Delivery
WDS provides training and services primarily at each company’s site. In some cases staff will work with companies to set up training classrooms and labs. If a business is located near a campus, training can be held there.

Partnerships
WDS believes that the best way to serve its customers is to develop working partnerships with industry councils, higher education institutions and economic development organizations. Project partnerships have been formed with a large number of economic development groups, as well as regional higher-education institutions.

CONTACT Workforce Development Solutions

GL Tucker, Executive Director
Workforce Development Solutions
900 Hwy 34 East
Detroit Lakes, MN 56501
218.846.3765 (office)
218.846.3706 (fax)
218.849.0243 (cell)
gl.tucker@minnesota.edu

Amy Hochgraber, Director of Business and Industry
Workforce Development Solutions
900 Hwy 34 East
Detroit Lakes, MN 56501
218.846.3766 (office)
218.846.3706 (fax)
218.849.0811 (cell)
amy.hochgraber@minnesota.edu

Karen Stenstrom, Director of Health
Workforce Development Solutions
1900 28th Ave. South
Moorhead, MN 56560
218.299.6586 (office)
218.291.4267 (fax)
karen.stenstrom@minnesota.edu
MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE

Accreditation and Approvals

Minnesota State Community and Technical College is accredited by the Higher Learning Commission: Member of the North Central Association
230 South LaSalle Street, Suite 7-500
Chicago, IL 60604-1411
Website: www.ncahlc.org
Phone: 800.612.7440 or 312.263.0456

Programs accredited/approved by additional agencies include:

Automotive Service Technology (Moorhead)
NATEF Certified
National Automotive Technicians Education Foundation
101 Blue Seal Drive, Suite 101
Leesburg, VA 20175
Phone: 703.669.6650
Fax: 703.669.6125
Website: www.natef.org

Cosmetology (Wadena)
Minnesota Board of Cosmetologist Examiners
2829 University Ave. SE, Suite 710
Minneapolis, MN 55414
Phone: 651.201.2742
Fax: 612.617.2601
email: bce.board@state.mn.us
Website: www.bceboard.state.mn.us

Criminal Justice (Moorhead)
Minnesota Board of Peace Officer Standards & Training
1600 University Avenue, Suite 200
St. Paul, MN 55104
Phone: 651.643.3060
Fax: 651.643.3072
Website: www.dps.mn.gov

Dental Hygiene and Dental Assisting (Moorhead)
Commission on Dental Accreditation of ADA
211 East Chicago Avenue
Chicago, IL 60611
Phone: 800.621.8099
Website: www.ada.org

Electrical Lineworker (Baudette, Wadena)
Minnesota Rural Electric Association (MREA)
11640 73 Ave. N.
Maple Grove, MN 55369
Phone: 763.424.1020
Website: www.mrea.org

Electrical Technology (Moorhead, Wadena)
Approved as one year of credit toward journeyman's license by the:
Minnesota State Board of Electricity
443 Lafayette Road N.
St. Paul, MN 55155
Phone: 651.284.5005 or 800.342.5354
Website: www.dli.mn.gov/BOE.asp

Health Information Technology (online)
Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)
233 N. Michigan Ave, 21st Floor
Chicago, IL 60601-5800
Phone: 312.233.1100
Fax: 312.233.1948
Website: www.cahiim.org

Massage Therapy (Wadena)
National Certification Board for Therapeutic Massage and Bodywork (NCBTMB)
3333 Burr Ridge Parkway, Suite 200
Burr Ridge, IL 60527
Phone: 630.627.8000 or 800.296.0664
email: info@ncbtmb.org
Website: www.ncbtmb.org

Medical Laboratory Technician (Fergus Falls)
National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Rd., Suite 720, Rosemont, IL 60018
Phone: 773.714.8880
Fax: 773.714.8886
Website: www.naaccsl.org

Nursing (AS) (Detroit Lakes, Fergus Falls, Moorhead, Wadena)
Approved by: Minnesota Board of Nursing
2829 University Ave. Southeast, #200, Minneapolis, MN 55414-3253
Phone: 612.317.3000
Toll Free: 800.627.3529
Fax: 612.617.2190
Website: http://mn.gov/health-licensing-boards/nursing/

Pharmacy Technology (online)
American Society of Health Systems Pharmacists
7272 Wisconsin Avenue
Bethesda, MD 20814
Phone: 866.279.0681
Website: www.ashp.org

Radiologic Technology (Detroit Lakes)
Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Drive Suite 2850, Chicago, IL 60606-3182
Phone: 312.704.5300
Fax: 312.704.5304
Website: www.jrcert.org

Plumbing (Moorhead)
32-credit program approved as 800 hours toward student's apprenticeship care in Minnesota and 1600-2000 hours in North Dakota:
Minnesota Department of Labor & Industry Construction Codes & Licensing Division, Licensing Unit
443 Lafayette Road N., St. Paul, MN 55155
Phone: 651.284.5005 or 800.657.3944
Website: www.dli.mn.gov

Practical Nursing (Diploma/AAS) (Detroit Lakes, Fergus Falls, Moorhead, Wadena)
Approved by: Minnesota Board of Nursing
2829 University Ave. Southeast, #200
Minneapolis, MN 55414-3253
Phone: 612.317.3000
Toll Free: 800.627.3529
Fax: 612.617.2190
Website: http://mn.gov/health-licensing-boards/nursing/

Surgical Technology (Moorhead)
Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of Accreditation Review Commission on Education in Surgical Technology and Surgical Assisting Commission on Accreditation of Allied Health Education Programs
25400 US Hwy 19 N., Suite 158
Clearwater, FL 33763
727.210.2350
Website: www.caahep.org
Access to Information

The college will make available the following information to all enrolled and prospective students:

Student Right to Know
(Graduation/Completion Rate)
The student Right to Know data discloses annual student completion and graduation rates and is available at minnesota.edu/righttoknow or in printed format by calling 877.450.3322, or by requesting one in Student Development Services on any M State campus, between 8 am and 4:30 pm, Monday – Friday.

Annual Security and Fire Safety Report
The Annual Security and Fire Safety Report informs the campuses of campus crime prevention programs, crime reporting procedures, emergency responses and a three-year statistical history of criminal activity on the college campuses.
A copy of the Annual Security and Fire Safety Report is distributed annually to students and employees and is available from the Student Development Services office on each campus. The Annual Security and Fire Safety Report also includes the current student housing fire statistics.
Prospective students and employees can obtain this information from the college website at minnesota.edu or by calling 877.450.3322.

Cost of Attendance
Visit the college website for information on tuition and fees, estimated book and supply costs, additional program costs and laptop requirements and costs.

Refunds for Dropped Courses and Withdrawals
Information about the Tuition Refund Policy and the return of Title IV grants and loans can be found on the college website, in the College Catalog and under the “Financial” heading in the Student Handbook.

Drop/Add/Withdraw
Refer to minnesota.edu/policies for the most current Drop/Add/Withdraw policy, which explains the process for making course enrollment changes.

Academic Program Information
A listing of all academic programs and their specific requirements is available on the college website at minnesota.edu/degrees.

Family Education Rights and Privacy Act (FERPA)
The Family Education Rights and Privacy Act affords certain rights to students concerning their education records. Primary rights include the right to inspect and review education records, the right to seek to have the records corrected and the right to have some control over the disclosure of information from the records. The complete FERPA policy is included in the College Catalog, in this Handbook and on the college website.

Financial Assistance
The college website and Student Development Services staff can provide the most current information on the availability of financial aid, including eligibility, determination of award amount, satisfactory academic progress standards, aid disbursement, student work opportunities and loan repayment.

College Policies
M State policies are regularly reviewed, and policy changes may occur during an academic year. Please visit the college website for updates to policies which may include the following topics:

Academics
Admission
Campus Environment
Degree Completion (Graduation)
Financial Aid
Nondiscrimination in Education and Employment
Online Majors
Registration
Student Records
Student Support Services

If you do not have access to the internet, contact a member of the Student Development Services team or call 877.450.3322 to receive the policies in an alternate form.

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Admission

Undergraduate Admissions Policy
Minnesota State Community and Technical College hereby adopts Minnesota State 3.4 Board Policy and Procedure 3.4.1 in full:

3.4 Undergraduate Admissions Policy:
www.mnscu.edu/board/policy/304.html
3.4.1 Undergraduate Admission Procedure:
www.mnscu.edu/board/procedure/304p1.html

As an open enrollment institution, M State provides students with the opportunity to advance their education regardless of prior academic preparation. We offer comprehensive academic offerings and student support services to educate and train students with diverse backgrounds, academic and personal experiences and life goals. For specific information about the admission process, visit minnesota.edu/admissions.
Advanced Standing/Placement

M State awards credit for previously gained knowledge and skills that are equivalent to coursework at the college. Such credit may be granted through various means such as direct transfer of courses of equivalent nature that were completed at regionally accredited institutions of higher education and through articulation agreements for college credit, Advanced Placement courses, CLEP, credit for prior learning or credit by examination.

The amount of credit granted by the college for an exam or other method will not exceed the credit the college grants for an equivalent course or course sequence. The college will not grant credit for exams that overlap completed coursework or for standardized tests for which the student has already gained credit. Credit granted through AP and CLEP may be used for partial fulfillment of the general education distribution requirements for the AA, AS and AAS degrees. Please contact the college registrar’s office with any questions about advanced standing/placement.

Assessment for Course Placement

Assessments in reading and math are required of all new students who enroll in more than eight credits at M State. Testing must be completed before registration. Schedules of test dates and times are available online at minnesota.edu/assessment. Accommodations for students with disabilities who need to complete assessment testing should be arranged in advance through a campus Disability Services Office. More information can be found online at minnesota.edu/disabilityservices.

Students who do not meet minimum test scores in reading and math will be required to enroll in developmental courses in those areas. Students must demonstrate proficiency in those courses by receiving passing grades before enrolling for the next course in the particular discipline. These courses provide the basic skills required for success in all college courses.

Developmental courses are not intended for transfer; credits earned in these courses will not meet distribution or elective requirements for graduation.

Immunization Requirements

All students must show proof of immunization against diphtheria, tetanus, measles, mumps and rubella. There are two exceptions: 1) if born prior to 1957, or 2) if graduated from a Minnesota high school in 1997 or after. Immunization forms are available at minnesota.edu/forms.

Notice to Students Regarding Possible Impact of Criminal Records

Students who have been arrested, charged or convicted of any criminal offense should investigate the impact that the arrest, charge or conviction may have on employment in a specific field or on access to federal, state or other higher education financial aid.

The following site may provide information regarding the impact of criminal records on future employment: Minn. Stat. Ch.609B COLLATERAL SANCTIONS, revisor.mn.gov.

Visiting Students

A student who does not intend to immediately pursue a certificate or degree program and who is not seeking financial aid need not go through the formal admission process. No proof of high school graduation or GED attainment is required of this type of student. Visiting students must provide official college transcripts in order to enroll in courses with prerequisites.

Visit minnesota.edu/admissions for more information or to apply as a visiting student.

Veterans Benefits

The majors offered by M State have been approved by the Minnesota State Approving Agency for veterans and their dependents eligible for GI Bill educational benefits. To determine eligibility or for assistance with GI Bill educational benefits, students should visit with one of our veterans assistance coordinators. For more information or to contact a veterans assistance coordinator, please see minnesota.edu/veterans. Veterans may receive credit for appropriate military training. The college transfer specialist will determine the number of credits acceptable to transfer.

Registration

All students who have completed the requirements for admission and have attended a registration event are eligible to register for courses.

Independent Study

In special circumstances, a student may obtain permission to take a regular course on an independent study basis. Students also have the opportunity to expand on an area of special interest by developing an independent study project with an instructor and with the approval of the dean of academic affairs.

Preparing to Transfer

Preparing to Transfer to a Four-Year University

Colleges and universities are working to make transfer easier. Students must plan ahead, ask questions and use pathways created by transfer and/or articulation agreements.

Students Currently Enrolled at M State:

Students should discuss plans with their M State advisor. Call or visit the intended transfer institution. Obtain the following materials and information:

- College catalog
- Transfer brochure
- Information on admissions criteria and on materials required for admission (e.g. portfolio, transcripts, test scores). Note that some majors have limited enrollments or their own special requirements such as a higher grade point average.
- Information on financial aid (how to apply and deadlines for application)

After reviewing these materials, make an appointment to talk with a program advisor or counselor at the transfer institution. Be sure to ask about course transfer and admission criteria.

If not currently enrolled in a college or university, students might begin to plan by meeting with a transfer specialist or admission officer from the intended transfer institution.
Understanding How Transfer of Credit Works:
Completion of the 40-credit Minnesota Transfer Curriculum at M State assures the acceptance of these credits as having satisfied the general education requirements of the Minnesota State system and some colleges within the University of Minnesota system. In addition, the four-year institutions in the state strongly recommend that students complete their associate degrees before transferring. The college has articulation agreements with several of these institutions guaranteeing the acceptance of the associate degree as completing the first two years of a baccalaureate degree. Check with an academic advisor for more information.

For students who transfer without completing an associate degree or the Minnesota Transfer Curriculum, the receiving college or university will decide which credits transfer and whether those credits meet its degree requirements. The accreditation of both sending and receiving institution can affect the transfer of credits earned.

Institutions accept credits from courses and programs like those they offer. They look for similarity in course goals, content and level.

Baccalaureate degree programs usually count credits in three categories: general education, major/minor courses, and prerequisites and electives. The key question is whether credits fulfill the requirements of the degree or program. Not everything that transfers will apply toward graduation.

Students who change career goals or majors may not be able to complete all degree requirements within the usual number of graduation credits.

Students interested in transfer will find additional resources on which credits may transfer at MnTransfer.org and transferology.com.

Preparing to Transfer to M State
Application for admission is the first step in transferring to M State. Fill out the application prior to the deadline, minnesota.edu/admissions. Pay the application fee. Request that official transcripts be sent from every institution attended. Be prepared to provide a high school transcript or GED test scores as well.

After the college notifies students of acceptance for admission, transcript credits will be evaluated for transfer. How courses specifically meet degree requirements is dependent on the student’s declared program of study/major. Some courses may not meet specific department or major requirements.

Questions about the evaluation may be addressed to the registrar’s office. Transfer credit decisions can be formally appealed.

Your Rights as a Transfer Student:
- A clear, understandable statement of an institution’s transfer policy.
- A fair credit review and an explanation of why credits were or were not accepted.
- A copy of the formal appeals process and the ability to appeal any decision made.

Usual Appeals Steps:
- Student completes the Transfer Review/Appeal form available in their eServices account. Supplemental information, such as a course outline or syllabus, must be uploaded for review.
- Information is reviewed by faculty within the appropriate department/discipline.
- Student receives notification of the outcome of the review/appeal via their M State email account.
- If the initial review/appeal is denied and the student wishes pursue a next level appeal, the student may log into eServices and click the “Appeal” button found next to the denied review/appeal entry. Additional information to support this second level appeal would be uploaded at this time and the appeal will be reviewed by the colleges chief academic officer.

Transfer of Credit to M State
Students wishing to transfer credit from another institution to M State must request an official transcript from each institution previously attended. If the student has taken courses at other institutions that are part of the Minnesota State system, the M State transfer specialist will be able to access this information electronically in most cases. For all other college transcripts or for transcripts from Minnesota State institutions that are not available electronically, it is the student’s responsibility to request that official transcripts be sent to M State. The transfer evaluation process will begin once all transcripts have been received and the student has been accepted to M State with a declared major. Students may be required to provide course descriptions, outlines and/or other information regarding their coursework as part of the transfer evaluation process. Technical courses need to have been completed within the last five years unless this requirement is waived (for more information, refer to the college’s Regency Policy).

Transfer of D Grades
If the student’s overall GPA at another institution is lower than 2.0, courses in which the student earned a grade of D at that institution will not be transferred to M State. These courses are listed on the student’s Degree Audit Reporting System (DARS) audit as NTD (non-transfer D). If the student’s GPA at the sending institution is above 2.0, courses at that institution in which a D grade was earned are transferred to M State for credit and are noted on the student’s DARS audit as TD (transfer D). An exception to this requirement is made for any course taken at another Minnesota State system institution if the course has met any of the Minnesota Transfer Curriculum (MnTC) goal area(s). If the student earned a grade of D in a course that meets any MnTC goal area(s) and was taken at a Minnesota State institution, the course will transfer to M State regardless of the student’s GPA at the sending institution.

Individual programs/departments reserve the right to not accept grades of D in fulfillment of program requirements. In these cases, the requirement is applied to all students in the program and to all courses taken, regardless of whether the course was taken at M State or at another institution.

Change of Major/Program or Campus at M State
Students who wish to change their major or move to another M State campus may make the request by completing a Change of Major/Program form, minnesota.edu/forms. The request will be reviewed and approved based on space availability in the program and/or campus requested by the student. The student will be notified by the college if the request cannot be accommodated.

Students in online majors may request a change of home campus by completing a “Change of Home Campus for Online Students” form at minnesota.edu/forms.
Student Records

Confidentiality of Student Records/FERPA Notification and Student Directory Data

Under the Minnesota Government Data Practices Act (MGDPA) and the Family Educational Rights and Privacy Act (FERPA), students have the right:

1. To inspect and review their educational records.
2. To request an amendment of records for the purpose of correcting inaccurate or misleading records, or records that violate student privacy or other rights in some fashion.
3. To have a hearing regarding records which the student believe are inaccurate or misleading, if the college does not amend records upon request.
4. To place a written statement explaining the disagreement with the college in their records, if the college does not amend records after the opportunity for hearing about whether the records are inaccurate or misleading.
5. To consent to disclosures of information that identify the student personally, except to the extent that disclosures are allowed without consent under state and federal law.
6. To file a complaint with the United States Department of Education if the student believes the college is not meeting the requirements of the federal law.

FERPA and the MGDPA permit disclosures of student information without consent to college officials with legitimate educational interest. A college official is a person employed by the college in an administrative, supervisory, academic support or support staff position, a person or company with whom the college has contracted, a student serving on an official college committee, a person serving on the Board of Trustees or in the system office, a person assisting another college official in performing his or her tasks, and/or contractors, consultants, and other service providers. A college official has legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Records Maintained on Students are Categorized as Follows:

1. Public Data – Data that has been designated as directory data is considered public. The Student Directory Data policy defines directory data for M State.
2. Private Data – Almost all educational data is private. Private data is accessible to the subject of the data and to those who have a business need for access to the data. Students must provide the college with prior written consent for disclosure of private data.
3. Confidential Data – Confidential data is not accessible to the subject of the data. Confidential data is accessible only to individuals or agencies authorized by law to have access to the data.

Student Directory Data

(Policy currently under review, please check minnesota.edu/policies for updated policy.)

Student directory data is considered public data, and the college may release it without a student’s written consent. A student may, however, make a written request to prevent the college from releasing directory data without the student’s written consent. M State designates the following information as directory data:

1. Name
2. Items needed to be accepted to the college and/or to a selective admissions program
3. Categories of holds preventing a student from registering for classes (i.e., academic or business office)
4. Major field of study
5. College email address
6. Honors and awards
7. Most recent educational agency or institute attended
8. Dates of attendance
9. Weight and height (used for student athletes only)
10. Dates of graduation, certification and awards

Because directory data is considered public, the college will release such information to anyone upon request except for the directory data of students who have requested suppression. Students who wish to suppress their directory data must submit a written request by using the Release of Information form available on the college’s website and selecting the DO NOT RELEASE option, which will remain in effect until a change is requested in writing.

Restricting your data will result in:

1. Name not being listed in commencement publications
2. Denial of all student directory information being released to third parties
3. The college will not verify enrollment or attendance

Students who wish to override a suppression request for a specific party or purpose may do so by providing a written authorization to the Registrar’s Office providing the specific details of the override.

M State designates the following information as limited directory data:

1. Permanent address
2. Telephone number
3. Student’s personal and/work email address (if supplied by student)

This information will be released with limitations to the college’s foundations and/or its alumni associations. Second-year students’ mailing addresses will be disclosed to Minnesota State universities for recruitment or marketing communications related to degree transfer.

The suppression of directory data also includes a suppression of limited directory data unless the student provides a written authorization to release limited directory data to the Registrar’s Office.

Change in Student Records

The college expects students to report any name, address, intended program/major, telephone number or other record changes on the forms available at minnesota.edu/forms.
Students who have name changes must provide the legal documentation as specified on the form available at minnesota.edu/forms. Degrees are awarded under the name the student has on file at the time the degree requirements are completed.

Academic records are maintained under a student’s legal name at the time of enrollment. Academic records and credentials are not modified unless the student has an active registration with the college.

Photography/Video for Publicity

Student images (photo or video) may be used by the college for public relations, marketing and/or publications. If a student does not wish to have his/her image used for these purposes, a written request must be filed with the Marketing and Communications office by contacting Tina Bartels at tina.bartels@minnesota.edu.

Academic

Classification of Students

A student who has earned fewer than 30 credits is classified as a freshman. One who has earned 30 credits or more is classified as a sophomore. Two other terms are used occasionally to refer to a student’s status: “Part-time” refers to students who carry less than 12 credits, and “visiting” refers to occasional students who are not currently pursuing a degree or certificate.

Graduation Policy

M State grants Associate of Arts (AA) degrees, Associate of Science (AS) degrees, Associate of Applied Science (AAS) degrees, Associate of Fine Arts (AFA) degrees, diplomas and certificates. The following general requirements apply to all candidates for each of the degrees.

General Requirements:

- Achieve a minimum cumulative GPA of 2.00.
- Successfully complete all required coursework for the program major(s) according to criteria established by the college. The actual graduation date will be within the semester in which all coursework, transfer credits and related materials required for program completion are finalized.
- Programs may have additional graduation requirements. These requirements are published and available from program faculty and advisors.
- Students must earn 20 semester credits/equivalent or one-third of the credits required for graduation at the granting institution, whichever is less.
- Requirements are established at the time of admission to the program.
- Students must complete an application for graduation. The application can be obtained on the college website at minnesota.edu/forms.

Career Services: Exploration, Counseling and Job Search

The college provides opportunities for students to explore careers and take part in career interest inventories through one-on-one and/or group assistance and counseling. Career resource materials are available for students in the Spartan Center on each campus. In addition, students have access to online job postings from employers specifically seeking M State graduates.

While the college does not accept responsibility for a student securing employment, students have the opportunity to take part in services and programs designed to build professional skills and intentionally explore the job search process. Services and programs include on- and off-campus job fairs, development and review of job search materials (such as resume, cover letter and portfolio), and individual support with interview skills and job search strategy. Enrolled students and alumni can access online job boards, events and materials by creating an account at careers.minnesota.edu.

Carl D. Perkins Vocational Career and Technical Education Act

M State partners with Lakes Country Service Cooperative and various education, business and community agencies to carry out services as part of the Carl D. Perkins Vocational Career and Technical Education Act of 2006.

The purpose of the Act is to improve career and technical education and create opportunities to enter high-skill, high-wage and high-demand employment in Minnesota for all learners. The Act places special emphasis on improving access and services for special student populations defined by law. These special populations include:

- Individuals with disabilities
- Individuals from economically disadvantaged families, including foster children
- Individuals preparing for non-traditional fields
- Single parents, including single pregnant women
- Displaced homemakers
- Individuals with limited English proficiency

Non-traditional fields also receive special emphasis in the Act. A non-traditional field is defined as a high-skill career field for which students from one gender comprise fewer than 25 percent of the students enrolled in the field. Examples include women in construction electricity or men in dental hygiene. M State encourages students to consider non-traditional fields, and we welcome questions and inquiries from all students and members of the public. For more information about non-traditional fields, please contact an enrollment manager at any M State campus.

For information about how to access Perkins services and programs at any M State campus, contact Associate Vice President of Academics Jill Abbott at jill.abbott@minnesota.edu.

Assessment of Student Learning

The college has developed a comprehensive model for the assessment of student learning. The model includes annual course and program assessment, program outcome assessment and institutional core ability assessment. Additionally, all academic programs conduct a comprehensive program review process every three years.

Assessment of Student Learning serves several important functions, and improving student learning remains at the top of the list of those functions. We encourage students to become familiar with their course competencies, program outcomes and the M State Core Abilities, so you are always well informed about the intended learning outcomes of your chosen program.

In addition to the assessment of student learning that takes place in courses, programs and through clinical, internship or practicum experiences in in-
Industry, M State encourage students to enhance their demonstration of the M State Core Abilities through involvement in cocurricular activities and student life/student development experiences.

For more information about assessment of student learning, contact Associate Vice President of Academics Jill Abbott at jill.abbott@minnesota.edu.

**M State College-wide Core Abilities**

**A. Demonstrate effective communication**

Indicators

1. Learner writes clearly, concisely and accurately in appropriate context and format.
2. Learner speaks clearly, concisely and accurately in a variety of contexts and formats.
3. Learner comprehends written and verbal communication.

**B. Demonstrate critical thinking**

Indicators

1. Learner draws conclusions based on evidence.
2. Learner distinguishes between facts, fallacies, inferences and judgments.
3. Learner considers multiple perspectives in problem solving.

**C. Demonstrate quantitative and logical reasoning**

Indicators

1. Learner performs computations using appropriate methods.
2. Learner demonstrates numerical and logical reasoning.

**D. Demonstrate personal and social responsibility**

Indicators

1. Learner demonstrates personal integrity and professional ethical practices.
2. Learner demonstrates respect for the rights, views and work of others.
3. Learner demonstrates personal accountability.
4. Learner demonstrates multicultural and global awareness.
5. Learner demonstrates the ability to work in a team.

**E. Demonstrate effective use of information technology**

Indicators

1. Learner applies technology to create solutions.
2. Learner uses technology to communicate.

**Academic Support Services**

The college provides students with numerous services to support their educational experience. Each campus has tailored its services to meet the needs of its student population and may include:

- Academic advising, counseling and support
- Career counseling, resources and assessment
- Career services
- English Language Learner services
- Free tutoring, study skills assistance and other learning services
- Career counseling and referrals to other agencies

For more information or to obtain any of these services, contact Student Development Services or the Support Center at 877.450.3322

**International Students (F-1, M-1 Visa)**

International students are required to be enrolled in 12 or more credits each semester (fall and spring). Upon arrival at the college, students must present their visa and passport bio page to the Designated School Official (DSO) on their campus. International students must purchase health insurance through Minnesota State prior to registering for classes.

**English Language Learners (ELL)**

Enrollment managers and academic advisors offer assistance to English language learners who seek aid in getting admitted and enrolled at M State. M State offers courses and support services to assist ELL students in reaching their educational goals. See an academic advisor, enrollment manager or resource specialist for more information on support services.

**Student Credit Load**

The maximum number of credits that a student is allowed to take in any one semester is 20. A student may complete the appeal form to petition the academic dean to take more than 20 credits in one semester.

**Credit for Prior Learning**

Credit for Prior Learning provides students an opportunity to earn college credit through alternative pathways by demonstrating how the student has met course specific outcomes for their program of study at college-level equivalency. The student may demonstrate this through professional life experiences, non-credit training or courses, and/or experiential setting opportunities.

Credit for Prior Learning may be earned through the following opportunities:

- Credit by examination either by faculty assessed course specific examination or standardized exams such as CLEP, AP or DSST.
- Faculty assessed course specific review by demonstration or portfolio.
- Institutional review of transcripts from a third party agency such as the American Council on Education (ACE).

Students requesting Credit for Prior Learning assessment must be actively enrolled and pursuing a degree through M State.

No more than 75 percent of a degree program conferred by Minnesota State Community and Technical College can be earned through Credit for Prior Learning (review Residence Policy regarding requirements).

An assessment fee may be charged for applicable Credit for Prior Learning services.

Financial aid amounts are based in part on the number of credits students register for each semester. Any Credit for Prior Learning credits are not counted toward determining a student’s status of full-time, three-quarter-time, half-time, or less than half-time to determine financial aid awards.

For additional information, please see the Credit for Prior Learning policy at minnesota.edu/policies.
Auditing Courses

Students intending to audit a course (earn no credit) are required to register for the course, pay the course tuition and fees and submit an Audit Grade Request form online. Auditing students may not need to meet regular course requirements but should confer with the instructor as to their privileges and responsibilities in the course. A student may change from credit to audit status or audit to credit status any time during the first five days of the semester. Courses audited are not included in determining the total credits earned toward a major or the cumulative grade point average.

Drop/Add/Withdraw

Full Semester Courses

DROP
- A student may drop a class within the first five (5) business days of a semester to avoid being billed for the course.
- No entry will be made in the student's academic record if a course is dropped within the first five (5) business days of a semester.

ADD
- A student may add a class within the first three (3) business days of a semester.

WITHDRAW
- A student has the option to withdraw from a course no later than the date on which eighty percent (80 percent) of the days in the academic semester have elapsed.
- A full semester course dropped after five (5) business days and before 80 percent (80 percent) of the semester has elapsed will appear on the student’s record as a Withdraw (W).
- Faculty have the obligation to enter the letter grade of FW (Failure to Withdraw) if a student ceases attending a course for 14 consecutive calendar days.
- If a student is issued a grade of FW as a result of non-attendance in a course, the FW is a final grade and may impact a student’s financial aid eligibility, dependent upon the last date of attendance entered. The FW is not calculated in the term or cumulative grade point average; but is calculated in the student’s completion percentage.
- Tuition and fees will be assessed for all courses for which the student is registered after the first five (5) business days of the semester.
- Courses withdrawn from after the fifth (5th) business day will not reduce the tuition obligation.
- The last day to withdraw for each course can be viewed in the students’ schedule available via eServices, which can be accessed through SpartanNet.

Short Session Courses

DROP
- Students will have one (1) business day past the first meeting day of the course to drop the course without being billed or having the course appear on the student’s academic record (transcript).

ADD
- Students must add courses no later than one (1) business day after the first meeting day of the course.

WITHDRAW
- A student may withdraw from the course no later than the date on which eighty percent (80 percent) of the instructional days for the course have elapsed.

- A course withdrawn from more than one (1) business day after the course begins and before 80 percent (80 percent) of the instructional days for the course have elapsed will appear on the student’s academic record as a withdraw (W).
- The last day to withdraw for each course can be viewed in the students’ schedule available via eServices, which can be accessed through SpartanNet.
- It is the student’s responsibility to drop or withdraw from a course. When a student does not officially withdraw, they will be issued the earned grade in each course for which they are registered and will be responsible for tuition and fees for those courses.

Full Withdraw
- A student who fully withdraws from the college within a specific period of time the student may be eligible for pro-rated refunds at increments of 100 percent, 75 percent, 50 percent, 25 percent.
- Student Development Service representatives may provide specific information on the dates for the current semester.

Financial Aid Eligibility
- Financial aid awards are affected by a full college withdraw.
- The College encourages students to speak with a financial aid representative to determine the financial impact if considering a full withdraw from the college.

Failure for Non-Attendance (FN)
FN (Failure for Non-Attendance) is a grade designation assigned when a student enrolled but never attended a course. For additional detail, see the Failure for Non-Attendance Policy on the college’s website.

Failure to Withdraw (FW)
FW (Failure to Withdraw) is a grade designation assigned when a student has ceased active participation for 14 consecutive calendar days (including holidays) prior to the end of the term. For additional detail, see the Failure to Withdraw Policy, which can be found on the college’s website.

Withdrawing from the College

Students needing to initiate a withdrawal from all their courses can do so online at minnesota.edu. Please note that tuition and fee refunds do not apply to withdrawing from individual courses.

The college encourages students to visit with their academic advisor prior to making a decision to complete the withdrawal process. Withdrawing may have an impact on student repayment of financial aid, eligibility to receive financial aid and satisfactory academic progress.

The college refunds tuition and fees to students who withdraw in accordance with Minnesota State policy. Students receive a proportionate refund for tuition and fees provided the withdrawal process is completed within the established deadline.

After the fifth day of the semester, the college issues refunds according to the following schedule:
Fall and Spring semesters:

**Date of Withdrawal**  **Refund allowed**
6th through the 10th day of the term ........................................... 75 percent
11th through the 15th day of the term ......................................... 50 percent
16th through the 20th day of the term ........................................ 25 percent
21st day and after ........................................................................ No refund allowed

Summer sessions and other terms at least three weeks in length but less than 10 weeks in length:

**Date of Withdrawal**  **Refund allowed**
6th through the 10th day of the term ........................................... 50 percent
11th day and after ....................................................................... No refund allowed

Minnesota Transfer Curriculum (MnTC)

The Minnesota Transfer Curriculum (MnTC) is the result of a collaborative effort by all of the two- and four-year public colleges and universities in Minnesota to define a common philosophy toward general education. The goal of this effort is to help students transfer their work in general education. Completion of a defined transfer curriculum at one institution enables a student to receive credit for all lower-division general education courses upon admission to any other Minnesota State institution.

Students who complete the general education transfer curriculum are certified in 10 areas of competency by faculty at the sending institution. Beginning January 1, 2002, all MnTC courses offered by Minnesota State institutions must transfer within Minnesota State into the goal areas as designated by the original institution. The following are the 10 goal areas of the MnTC:

1. Written and Oral Communication
2. Critical Thinking
3. Natural Sciences
4. Mathematics/Symbolic Systems
5. History and the Social and Behavioral Sciences
6. The Humanities—the Arts, Literature and Philosophy
7. Human Diversity
8. Global Perspective
9. Ethical and Civic Responsibility
10. People and the Environment

The college Catalog contains a complete listing of all the MnTC courses and their corresponding goal areas. The college website also contains this listing.

Degree Requirements

The requirements for the AA, AS, AAS and AFA degrees, diplomas and certificates are detailed in the College Catalog, in addition to being located on the M State website.

Please consult an academic advisor with questions about the course requirements for a specific degree, diploma or certificate.

Academic Advising

It is the college’s philosophy that academic advising is essential to the growth and development of each individual student. Academic advising will be available to all students to assist with scheduling and academic issues. It is the intent of the college to provide the student with personally relevant information and instructional assistance.

Mid-Term Progress

Students should meet with their advisors to review mid-term progress each semester.

Final-Term Grades

Final grades are provided to students upon completion of an academic term.

Grading

<table>
<thead>
<tr>
<th>Letter</th>
<th>Grade Value</th>
<th>Grade Point Value Per Credit Hour</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
<td>4 x # course credits</td>
</tr>
<tr>
<td>B</td>
<td>Above Average</td>
<td>3</td>
<td>3 x # course credits</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
<td>2 X # course credits</td>
</tr>
<tr>
<td>D</td>
<td>Below Average</td>
<td>1</td>
<td>1 x # course credits</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
<td>0 x # course credits</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>0</td>
<td>0 x # course credits</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
<td>No grade point value</td>
<td>None</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
<td>No grade point value</td>
<td>None</td>
</tr>
<tr>
<td>CR</td>
<td>Credit by Examination</td>
<td>No grade point value</td>
<td>None</td>
</tr>
</tbody>
</table>

Other Designations:

- **AU** Audit of a class for no credit. The AU designation does not impact grade point average or satisfy academic progress. **
- **Z** Designator to indicate faculty member has not submitted a grade.
- **FN** Failure for non-attendance. Used at the end of the course’s drop/add period when the student has never attended. The FN designation does not impact grade point average but may prevent financial aid from applying for the course (or will force a recalculation of financial aid that may have been applied prior to the posting of the FN). In the event of an FN grade posting, the student no longer has access to any course content, including electronic access to the course.
- **FW** Failure to withdraw. When the student has ceased active participation for 14 consecutive calendar days prior to the end of the term, the instructor may issue a grade of FW. Active participation in an online course is defined as completing an assignment from your instructor. Examples of this may include submitting a discussion post, uploading an assignment to the drop box, taking a quiz, or completing a survey, etc. The type of assignment may vary by course and instructor. Simply logging into the online classroom does not count as active participation. The FW designation does not impact grade point average and may force a recalculation of financial aid applied if the FW represents a total withdrawal from all coursework for the term prior to the 60th percentile date for the term. In the event of an FW grade posting, the student no longer has access to any course content, including electronic access to the course.

**A student auditing a course will pay the normal tuition rate.**

**A student may request faculty to assign the student a grade of Incomplete (I). A grade of “I” will convert to an “F” at the end of the subsequent semester (excluding summer semester) unless the faculty member submits a grade change with the earned grade to replace the I.**

An incomplete grade must be removed by completing course requirements at the end of one semester, excluding summer semester. Any incomplete grade not removed will be changed to an “F.”
### Repeating Courses
All courses taken at M State may be repeated. A student may repeat a course an unlimited number of times, unless stated otherwise. Both the original and the repeat grade will appear on the student’s transcript. The highest grade will be used to compute the student’s GPA. Exceptions include choir, music lessons and student newspaper. Because financial aid may not cover the cost of repeated courses, students are advised to consult with the financial aid office.

### Grade Point Average
Academic progress will be evaluated in part in terms of grade point average. The following system will be used to establish a student’s grade point average and will be the only grades included in the GPA calculation:

- **A** = 4 grade points per credit
- **B** = 3 grade points per credit
- **C** = 2 grade points per credit
- **D** = 1 grade points per credit
- **F** = 0 grade points per credit

A GPA is determined by the sum of all grade points divided by total credits attempted, except those credits that carry grades other than the usual A - F grades.

### Academic Forgiveness
Academic forgiveness gives an undergraduate student a one-time opportunity to establish a new grade point average.

Academic forgiveness cannot be granted if a student has earned a post-secondary degree following his/her initial M State attendance and has applied M State credits toward that degree. Courses that have been used for completion of certificates, diplomas or degrees are not subject to academic forgiveness.

Please see the college website at minnesota.edu/policies for the complete Academic Forgiveness Policy.

### Satisfactory Academic Progress
All students in a program of study must meet satisfactory academic progress standards in order to remain enrolled and maintain eligibility for financial aid. Students must maintain an acceptable grade point average and completion rate for their registered credits to meet M State’s standards for satisfactory academic progress. The acceptable grade point average and completion rate are based on cumulative registered credits and are detailed below:

#### Qualitative Measure
Grade Point Average (GPA): All students are required to meet the minimum cumulative GPA as shown below.

<table>
<thead>
<tr>
<th>Cumulative Registered Credits</th>
<th>Minimum Required GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 5</td>
<td>0.00</td>
</tr>
<tr>
<td>6 – 23</td>
<td>1.75</td>
</tr>
<tr>
<td>24 or more</td>
<td>2.00</td>
</tr>
</tbody>
</table>

#### Quantitative Measure
Completion Percentage: All students are required to earn a minimum of their cumulative registered/at tempted credits. Grades of F, FN, FW, I, NC, W and Z (or blank/missing) are treated as registered credits but NOT earned credits and thus negatively impact the percentage of completion.

**Formula:**

\[
\text{Percent earned} = \frac{\text{cumulative earned credits}}{\text{cumulative registered credits}} \times 100
\]

### Evaluation Period
The college will evaluate satisfactory academic progress after each term which includes fall, spring and summer. All students with registered credits during a term will be evaluated at the end of that term.

### Failure to Meet Standards
**Warning Status**: If at the end of the evaluation period a student has not met either the college’s GPA or completion percentage standard, the student will be placed on warning status for one evaluation period. Students on warning status are eligible to register and receive financial aid.

**Reinstatement of Students on Warning Status**: If at the end of the academic warning period a student who has been on warning status has met both the cumulative GPA and cumulative completion percentage standards, the warning status is ended and the student is returned to good standing.

### Suspension of Students on Warning Status
If at the end of the warning period a student who has been on warning status has not met both the college’s cumulative GPA and completion percentage standards, the student shall be suspended. Students on suspension are not eligible to register or receive financial aid. Without an appeal (see “Appeals and Probation” below), the suspension period is for one calendar year. Students returning after the one-year suspension period must still appeal for potential financial aid reinstatement.

### Suspension of Students for Other Reasons
**Suspension for Inability to Meet Program Requirements within the Maximum Time Frame**: If at the end of the evaluation period the college determines it is not possible for a student to raise his or her GPA or course completion percentage to meet the standards before the student completes his or her program of study at the college, the student shall be suspended from financial aid eligibility.

**Suspension for Exceeding the Maximum Time Frame**: If at the end of the evaluation period a student has failed to meet the college’s standard for measurement of maximum time-frame, the student shall be suspended from financial aid eligibility.

**Suspension for Extraordinary Circumstances**: The college may immediately suspend students in the event of extraordinary circumstances, including but not limited to previously suspended (and reinstated) students whose academic performance falls below acceptable standards during a subsequent term of enrollment; students who register for courses, receive financial aid and do not attend any classes; and students whose attendance patterns appear to abuse the receipt of financial aid.

**Suspension at Another Minnesota State Institution**: Students who have been suspended from another Minnesota State institution who have an active suspension on their record will not be allowed to enroll at the college. Students whose suspension period has elapsed may enroll at the college but may not be eligible for financial aid until they’ve academically performed at an acceptable term level (75 percent completion and a term GPA of 2.25 or greater). These students will enter the college on probationary status.

### Appeals and Probation
**Appeals**: Students may appeal their suspension based on unusual or extenuating circumstances. Extenuating circumstances include:

- Serious illness or injury to a student or immediate family member (parent, spouse, sibling or child) that required extended recovery time.
• Death of an immediate family member (parents, spouse, sibling or child)
• Significant trauma in a student’s life that impaired the student’s emotional and/or physical health
• Other unexpected documented circumstances beyond the control of the student
• Suspension due to an excessive number of credits without completing a degree, diploma or certificate

The student shall submit, as part of the appeal, information as requested regarding why the student failed to make satisfactory academic progress and what has changed in the student’s situation that would allow the student to demonstrate satisfactory academic progress (SAP) at the end of the next evaluation period.

An appeal may be approved only if the college:
1. Has determined that the student should be able to meet SAP standards at the end of the next evaluation period; or
2. Develops an academic plan with the student that, if followed, shall ensure that the student is able to meet SAP standards by a specific point in time; and
3. Maintains a standard of term performance of a minimum of 75 percent completion rate AND a minimum GPA of 2.25 until such time as satisfactory cumulative measures are met.

Probation: A student whose suspension period of one year has passed or who has been granted reinstatement through the appeal process shall be placed on probation. If, at the end of that evaluation period, a student on probation status:
• Has met the college’s cumulative grade point average and completion percentage standards, the student shall be returned to good academic standing.
• Has not met the college’s cumulative grade point average and completion percentage standards but has met the conditions specified in his/her academic plan AND a standard of term performance of a minimum of 75 percent completion rate AND a minimum GPA of 2.25, the student shall retain his/her financial aid and registration eligibility under a probationary status for a subsequent evaluation period.
• Has not met the college’s cumulative GPA and completion percentage standards and also has not met the conditions specified in his/her academic plan, the student shall be re-suspended immediately upon completion of the evaluation period. The suspension period is for one calendar year; students must appeal for potential financial aid reinstatement.

Notification of Status and Appeal Results
Status Notification: Students are notified in writing (email or letter) when the evaluation of satisfactory academic progress results in Warning, Suspension or Probation. The notice includes the conditions of the current status and the conditions necessary to regain eligibility for registration and financial aid (where applicable). Notice of suspension also includes the right and process necessary to appeal suspension.

Appeal Result Notification: Students are notified in writing (email or letter) of the results of all appeals. Approved appeals may include specific conditions under which the appeal is approved and any conditions necessary to retain eligibility for registration and financial aid.

Reinstatement
Students who have been suspended from financial aid eligibility may be reinstated after an appeal has been approved or the minimum cumulative GPA and completion percentage standards have been achieved. Students suspended from the college may be reinstated to enroll for classes after an appeal or after the suspension period of one year has passed but may not be eligible for financial aid until they meet the conditions of their appeal for financial aid reinstatement.

Definitions
Credits: The unit by which academic work is measured.
Registered (Attempted) Credits: The total number of credits for which a student has officially enrolled at the end of the registration drop/add period each term.
Cumulative Registered Credits: Cumulative registered credits are the total number of credits registered for all terms of enrollment at the college, including summer terms and terms for which the student did not receive financial aid.
Earned Credits: Earned credits include the grades of A, B, C, D, AH, BH, CR and P. They are successfully completed credits that count toward the required percentage of completion (66.6 percent) as defined by the quantitative measure.
Attempted, NOT Earned: Grades of F, FN, FW, I, NC, W, Z (or a blank/missing grade) will be treated as credits attempted but NOT successfully completed (earned).
Academic Forgiveness: Credits for which a student has been granted academic forgiveness WILL be included in all financial aid satisfactory progress measurements.
Audited Courses: Audited courses are not financial aid-eligible courses and are not included in any financial aid satisfactory academic progress measurements.
Consortium Credits: Consortium credits are credits for which a student is registered at another college/university, which are accepted in transfer by this college and are included for purposes of processing financial aid at this college. These credits are included in all satisfactory academic progress measurements.
Developmental Credits: Developmental credits are awarded for remedial course work (below 1000 level). Students may receive financial aid for developmental credits up to a maximum of 30 credits (English Language Learner courses). These credits are included in all satisfactory academic progress measurements. However, up to 30 developmental credits are excluded from the maximum timeframe calculation.
Incompletes: The grade of “I” (incomplete) is a temporary grade which is assigned only in exceptional circumstances. It will be given only to students who cannot complete the work of a course on schedule because of extraordinary circumstances beyond their control. An “I” grade will automatically become a “F” grade at the end of the next term (not including summer sessions) if requirements to complete course work have not been satisfactorily met. Faculty have the option of setting an earlier completion date for the student. A grade of “I” is not included when calculating grade point average or earned credits. Thus, it does not impact GPA but does negatively impact earned credits and, therefore, negatively impacts the student’s percent of completion.
Repeat Credits: Repeat credits are credits awarded when a student repeats a course in order to improve a grade. A student may repeat a class as allowed by the college. The college will determine, based on its Repeating Courses Policy, which grade will become the grade calculated in the GPA. All repeated credits are included in the percent of completion and maximum time frame calculations.
Transfer Credits: Transfer credits are credits earned at another institution which are accepted by this college. Transfer credits which are accepted by M State shall be counted as credits attempted and completed for calculation of completion percentage and maximum time frame. Grades associated with these credits are not included in calculating GPA.
Withdraw: The grade/mark of “W” (withdraw) is assigned when a student withdraws from a class after the drop period. It is not included in calculating grade point average or earned credits. Thus, it does not impact GPA.
Academic Honesty and Integrity

M State is committed to providing students with the competencies and skills associated with academic honesty and integrity. Students are expected to meet their academic requirements with honesty and integrity pursuant to this policy. Students are expected to be the sole authors of their work and to acknowledge the authorship of others’ work through proper citation and reference. Use of another person’s ideas, including another student’s, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. The college extends the concept of plagiarism to include issues of copyright and trademark infringement. Submission of prior work without self-citation constitutes self-plagiarism and academic dishonesty and is prohibited conduct. Collaboration in the completion of course work is prohibited unless explicitly permitted by the course instructor. Where such collaboration is permitted by the course instructor, students must acknowledge any collaboration and its extent in all submitted course work.

The consequences of academic dishonesty are determined on a case-by-case basis by each instructor and may include but are not limited to one or more of the following academic consequences: non-acceptance of submitted course work, failing grade on an assignment, lower grade in a course, or failing grade in a course. In severe cases, the student may be referred to the student code of conduct process for possible additional sanctions.

M State students, faculty and staff share the responsibility for promptly reporting any alleged violation of this policy.

Rationale

In support of M State’s core values, this policy establishes the standards for academic honesty and enforces the college’s commitment to teaching and learning while maintaining authenticity, ethics and scholarship in one’s work as a student at the college. This policy also establishes the due process procedures for the internal resolution of acts of academic dishonesty.

Definitions

Academic dishonesty: Academic dishonesty refers to the use of either intellectual property produced by the work of others that has not been given the appropriate recognition or the intentional misuse of quantitative or qualitative data.

Plagiarism: Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else’s ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date and publication medium. Students must take great care, whether in a draft or final version of a paper or project, to distinguish their own ideas and language from information acquired from other sources. Sources include published primary and secondary materials, electronic media, unpublished materials, and information and ideas gained through other people.

Consequence: A consequence is an academic decision that may be issued due to committing an act of academic dishonesty. Academic consequences may include but are not limited to one or more of the following: non-acceptance of submitted course work, failing grade on an assignment, lower grade in a course or failing grade in a course. In severe cases, the student may be referred to the student code of conduct process for possible sanctions. This list is not exhaustive.

Academic Appeals

Students may appeal any academic issue and discuss it with the appropriate employee(s) and/or administrator(s) as established by college policy or procedure. Students have the right to seek remedy through the college’s designated academic appeal process. Students should use available informal means (direct conversation) to resolve disputes before filing an appeal. There will be no retaliation of any kind against students, faculty or staff who participate in the appeal process. For more information about filing an academic appeal, contact Student Development Services.

Student Grievances

Students have the right to file a grievance in writing if they have allegations of improper, unfair, arbitrary or discriminatory action by an employee involving the application of a specific provision of a college rule or regulation. Students should use available informal means to have decisions reconsidered before filing a grievance. No retaliation of any kind shall be taken against a student for participation in a complaint or grievance. These procedures shall also protect data privacy rights. For more information about filing a student grievance, contact Student Development Services. Student Grievance form can be found online at minnesota.edu/forms.

Disruption-Free Classroom

The college strives to create a classroom atmosphere that is characterized by respect, openness, and cooperative interactions. Students play a critical role in helping to create a classroom environment where all students can learn without disruption. Students are not allowed to be disruptive in class.

Examples of disruptive behavior include, but are not limited to:

• Making loud and distracting noises.
• Eating in class when it is prohibited.
• Monopolizing classroom discussions to the detriment of student learning or the faculty member’s ability to teach.
• Excessive amounts of emails sent directly to the faculty member that monopolize the faculty member’s time and are detrimental to the faculty member’s ability to teach.
• Repeatedly interrupting when the instructor or others are speaking or persisting in speaking without being recognized.
• Using cell phones or electronic devices when prohibited.
• Behavior that distracts the class from the subject matter or discussion.
• Refusal to comply with faculty direction.
• Repeatedly leaving or entering the classroom during class without authorization.
• Failing to respect the rights of other students to express their viewpoints.
• Electronic conversations that are off-topic or not related to learning materials.

A student who has been notified and/or removed three or more times for disruptive behavior may be referred to the appropriate academic administrator. It is possible that a student who has been notified or removed from a class three or more times will not be allowed to continue to attend or participate in the class in accordance with due process procedures. Removal from a course may result in a student earning a failing grade for the course, and the student will not be eligible for a refund. Any adjustment a failing grade or removal from a course may cause to the student’s financial aid eligibility and/or financial implications is solely the student’s responsibility.

Examples of extreme disruptive behavior include, but are not limited to:

• Verbal abuse such as profanity or derogatory language, hostile
remains of fuel, oil, natural gas or other sources that are lower.

A student who has been notified and/or removed for extreme disruptive behavior will be referred to the appropriate academic administrator. A student who has been notified or removed from a class will not be allowed to continue to attend or participate in the class in accordance with due process procedures. Removal from a course may result in a student earning a failing grade for the course, and the student will not be eligible for a refund. When a student earns a failing grade or is removed from a course, it may impact the student’s financial aid eligibility and/or result in financial implications the student would be responsible for addressing.

Definitions
Class/Classroom - a physical classroom, lab, instructional field space, off-site practicum/clinical space or the online instructional environment.
Notification – a notification can be delivered via the student’s college email account, mailed to the students address on file with the college, delivered in person or a combination of the aforementioned methods.

Program Interruption
The academic calendar of M State is subject to modification or interruption due to occurrences such as fire, flood, labor disputes, interruption of utility services, acts of God, civil disorder and war. In the event of any such occurrences, the college will attempt to accommodate students. The college will not, however, guarantee that courses of instruction, extracurricular activities or other college programs or events will be completed or rescheduled.

Proctoring
Proctoring services are available to enrolled M State students on each of the four campuses at no cost.
Proctoring services are available to enrolled Minnesota State system students for an online or distance education course at no cost.
If the student and/or faculty choose to utilize approved remote proctoring services, a fee may apply.
Proctoring services are available for a fee to all other students or community members.
M State will only proctor exams during regular business hours and when the identified site proctor, or designee, is available. The college will make reasonable efforts to provide all necessary proctoring needs. If the proctoring request exceed staff/proctor or facility capabilities, the students/examinee will be directed to alternate proctoring options.

Financial

Tuition
Tuition for all students is set annually by the Minnesota State system Board of Trustees and charged on a per credit basis.
All applicable tuition charges are billed to the student and are payable on or before the tuition and fee due date. Tuition not paid by this date may result in the cancellation of all courses per Board Policy 5.12.3.

Cancellation for Non-Payment
Minnesota State system policy requires that minimum payment criteria must be met fifteen business days prior to the first day of each semester to avoid an administrative drop of all courses a student is enrolled in for the term. To ensure courses are not canceled, a student must have one of the following payment criteria in place.

1. Pay in full using cash, check or credit card.
2. Enroll in a payment plan. The student has made a down payment of 15 percent or $300, whichever is less, and an active payment plan with Nelnet Business Solutions/FACTS is in place.
3. Apply for federal financial aid. Once the student has applied for financial aid and M State has received the application (FAFSA) results from the Department of Education, courses will be confirmed. To access the FAFSA application, go to fafsa.ed.gov.
4. Submit a scholarship or third-party authorization. As soon as M State has received payment in the form of scholarships, third-party authorizations or tuition waivers that meet the minimum down payment of 15 percent or $300, courses will be confirmed.
5. Apply for Veteran’s Education Benefits and complete the Veteran’s Benefit Sign-Up form.
6. For international students, an active I-20 or DS20.19 is on file.

Create an Active File
Students can manage their account online at SpartanNet by clicking on the eServices link. Once student tuition and fee bills are posted, there will be messages to indicate whether the payment criteria to avoid an administrative drop have been met. If any known payment or financial aid information does not appear on the online screens, students should contact Student Services for resolution as early as possible.

Students who register and later change their plans for attendance should not rely on the cancellation for nonpayment (commonly referred to as drop for non-payment) process to complete administrative drops for them. Students who do not wish to be enrolled must drop their courses via the online registration process and officially withdraw from M State for accurate determination of their financial obligation to the college, if any.

Tuition Reciprocity
Reciprocity agreements exist between the state of Minnesota and the states of North Dakota, South Dakota, Wisconsin, Michigan, Missouri and Nebraska. Students of these states and the province of Manitoba are entitled to pay a special approved tuition rate. Reciprocity application forms are available from high school counselors, online or Student Development Services.

Non-resident Tuition
M State allows students from states other than Minnesota and from states that do not have reciprocity agreements to attend and pay resident tuition rates.
General Fee for Senior Citizens
As defined in Minnesota Statute §135A.51, a senior citizen who is a legal resident of Minnesota who has reached 62 years of age before the beginning of any term in which a course of study is pursued or is a person receiving a railroad retirement annuity who has reached 60 years of age before the beginning of the term, can pay an administrative fee of $20 per semester credit to be enrolled in credit courses on a space-available basis after all students who pay regular fees have been accommodated.

Residency
Students who seek to qualify for in-state tuition must first meet the following threshold requirements:

- Students must have resided in Minnesota for at least one calendar year immediately prior to applying for in-state tuition.
- Residence in Minnesota must not be merely for the purpose of attending the college.

Each of the following additional facts and circumstances will be considered when responding to a petition for in-state tuition. Not one of these factors is necessary or sufficient to support a claim for in-state tuition.

- Continuous presence in Minnesota during period when not enrolled as a student
- Sources for financial support are generated within Minnesota
- Domicile in Minnesota of family, guardian or other relatives or persons legally responsible for student
- Ownership of a home in Minnesota
- Permanent residence in Minnesota

The following circumstances, standing alone, shall not constitute sufficient evidence of domicile to affect eligibility for in-state tuition under these regulations but may be considered as part of the demonstration of the facts and circumstances listed above.

- Voting or registration for voting
- The lease of living quarters
- A statement of intention to acquire a domicile in Minnesota
- Domicile of student’s spouse in Minnesota
- Automobile registration
- Other public records, e.g. birth and marriage records

College Fees
Various fees will be assessed to students depending upon enrollment status, courses attempted and services offered by the campus attended. The following is a list of the fees that may be assessed. Fees unique to a program or a class offering are detailed in the course requirement list. Fees shall be established annually by the president. A fee schedule is available from the campus business office for the current academic year. Fees may vary based on the campus where the student is enrolled.

Application Fee
All students entering the college will be assessed a one-time, non-refundable application fee.

Art Fee
All students in studio art courses are assessed a fee to partially cover the cost of studio materials.

Athletic and Football Fee
Students in varsity courses may be assessed a fee to cover the costs of travel uniforms and road trip expenses.

Background Check Fee
Background check fees will be assessed annually to students enrolling in courses requiring direct contact with individuals in licensed institutions.

Certification Fee
Assessed to students taking AMST, DSET, PHRM, PWST and REFR.

Clinical Makeup Fee
In the event that a student is absent from excessive clinical time, he or she will be required to make up some or all of that time. Because this is extra time for the faculty and extra expense for the college, this fee will be assessed to the student.

Cosmetology Supply Fee
Students are assessed a fee to cover the cost of salon projects.

CNA/HHA Testing Fee
Any nursing assistant or home health aide student wishing to take the certification test through the college is assessed this fee. The fee is used to pay for the cost of scoring the exam.

Credit by Examination Fee
When a student wishes to test out of a course through credit by examination, a credit by examination fee shall be assessed.

Culinary Arts Fee
All students in the chef training program are assessed a fee to cover meals the student consumes during the courses.

Drug Testing Fee
Students in the ELWT, GAS or ENST programs are assessed a fee for drug testing required for the program.

Equine Fee
All courses taught at Red Horse Ranch require a fee to cover the costs of tack and the use of ranch horses.

Golf Green Fee
Students taking golf will be assessed a fee to pay for the green fees at the community golf courses.

Late Payment Fee
Late payment fees will be assessed on the 21st day of each semester to any student who has not paid tuition, when no proof of financial aid or other funding is provided. The fee is based on the number of credits for which a student is registered.
Nursing Application Deposit
A deposit is required of all students applying for the nursing programs. The deposit is returned to the applicant if he or she is not accepted into one of the college’s nursing programs. If the student is accepted, the deposit is credited toward the student’s first term tuition.

Nursing Fee – ATI Package
Assessment Technologies Institute (ATI) is a comprehensive assessment and review program that is integrated into all Nursing program courses. The package includes access to computer modules, content review, lab skills and a live NCLEX Review Course delivered at each campus at the end of the program.

Paying/Common Area Fee
Paying fees will be assessed on a per credit basis. The proceeds from this fee are used to upgrade and maintain the college parking facilities.

Pottery Clay Fee
Students taking the pottery course will be creating and keeping clay projects throughout the course. Each student will be assessed a fee to pay for the cost of the clay projects.

Private Music Lessons
Students wishing to take private vocal or instrumental music lessons will be assessed a fee for the lessons.

Professional Liability Fee
Professional liability fees will be assessed to students enrolling in courses requiring clinical/internship experience. This fee is used to purchase professional liability insurance on the student’s behalf.

Replacement of Student Identification Card
Each student will receive a student identification card at no charge. In the event the card needs to be replaced, a fee will be assessed to the student.

Technology Fee
Technology fees shall be assessed on a per credit basis as outlined in the technology fee plan. Proceeds from this fee shall be used to upgrade and maintain the technical infrastructure of the college and to assist in the staffing of technology-related positions.

Testing Fee
Assessed to students taking HLTH 2215, RADT and SURT courses.

Student Activity Fee
A student activity fee shall be charged to all students to support Student Life activities.

Student Association Fee
All students shall be assessed a fee which is passed on to the Minnesota State College Student Association for college membership dues. This fee shall be assessed on a per credit basis.

Uniform Deposit Fee
This fee will be assessed to all students who rent a uniform from the college. The deposit is charged to ensure all uniforms are returned to the college in the same condition they were received (less ordinary wear). The fee is refundable at the end of the year if all uniforms are returned undamaged.

Uniform Fee
This fee is assessed to students in the culinary or health programs for the purchase of uniforms required for these programs.

Uniform Rental Fee
This fee is assessed to students in programs that require student uniform rental. The fee is used to pay for the rental of the uniform.

Wellness Fee (Moorhead campus only)
This fee is assessed to students enrolled in courses on the Moorhead campus. The fee is used to operate the M State Fitness Center located on the Moorhead campus.

Student Payments
All tuition and fees are due on the tuition and fee due date which is established annually by the college. All courses will be cancelled unless the student has met the payment definition outlined in the Cancellation for Non-Payment section of the College Catalog or Student Handbook.

In the event that the student does not receive enough financial aid, scholarship or third-party agency payment to cover all charges, the account will be considered delinquent. Also, if the student does not stay current with the agreed-upon payment plan, the account will be considered delinquent.

In the event that the account becomes delinquent, notice will be sent to the student which will make the student aware of the delinquency and notify him or her that payment in full must be received immediately.

Any student who does not make payment after the above notice is received will be sent a State of Minnesota 20-day letter. This letter will inform the student that the account will be turned over to the Minnesota Collection Entity if payment is not received.

In addition, no student with an outstanding account will be allowed to register for future courses, and his or her college transcript will be held until payment in full has been received.

Deferment/Payment Plan
In accordance with Minnesota State Policy 5.12, M State has the ability to grant deferments and payment plans to students demonstrating the need for such arrangements.

A deferment is defined as an agreement between the college and the student to delay payment until financial aid, which is sufficient to cover all student charges, arrives at the college. Financial aid for this purpose is described as grants, loans, scholarships or third-party authorizations. Deferments may be granted from authorized representatives of the financial aid or business offices.

M State has made arrangements with Nelnet Business Solution/FACTS which allow students to pay for their charges throughout the term. To access these services, go to minnesota.edu/spartannet and click on E-Services.

All payment plans must be paid in full before students will be allowed to register for future terms. Failure to stay current with a payment plan will put a student’s account in a delinquent status, and collection efforts will begin.
Tuition Refund

Tuition will be refunded to students canceling their registration at the college through a formal withdrawal process and in accordance with Minnesota State policy. Refunds are applicable only to complete withdrawals from the college. The following refund schedule applies to students who completely withdraw from the college, which requires withdrawal from all courses for which a student is registered in the term.

Refund for fall and spring term courses (at least 10 weeks in length):

- Withdrawal from 1st through 5th business day: 100 percent refund
- Withdrawal from 6th through 10th business day: 75 percent refund
- Withdrawal from 11th through 15th business day: 50 percent refund
- Withdrawal from 16th through 20th business day: 25 percent refund
- Withdrawal after the 20th business day: 0 percent refund

Refund for summer session courses (at least three weeks in length):

- Withdrawal from 1st through 5th business day: 100 percent refund
- Withdrawal from 6th through 10th business day: 50 percent refund
- Withdrawal after 10th business day: 0 percent refund

Courses that start after the fifth instructional day of the term or courses that are less than three weeks in length will have a 100 percent refund of tuition if the student withdraws prior to the end of the first business day following the first class meeting. If the withdrawal request is made on the second or third business day following the first class meeting AND the withdrawal results in 100 percent course withdrawal, the student is entitled to a 50 percent refund. There is no refund for withdrawal from such short-term courses after the third business day following the first class meeting. Federal pro rata refund will apply to federal financial aid recipients enrolled for the first time at the college.

Return of Title IV Funds for Financial Aid Recipients

Federal regulations require Title IV financial aid funds (Pell Grant, SEOG Grant, Direct Stafford Loans) to be awarded under the assumption that a student will attend the institution for the entire period in which federal assistance was awarded. When a student withdraws from all courses for any reason, including medical withdrawals, he/she may no longer be eligible for the full amount of Title IV funds that he/she originally received. Under this policy, students earn financial aid in proportion to the time they are enrolled up to the 60 percent point of the term. After the 60 percent point in the term, the student will be considered to have earned all of the federal aid that was originally awarded to him/her and they will not be required to return any funds. Students should consult with financial aid office personnel before completely withdrawing from college to accurately determine repayment liability to federal financial aid sources.

Federal regulations require a recalculation of financial aid eligibility if a student:

- Completely withdraws from all courses (Official Withdrawal);
- Stops attending before the end of the semester (Unofficial Withdrawal);
- Does not complete all module classes in which the student is enrolled as of the start date of the semester and/or the start date of the module classes.

The unearned share of the federal financial aid must be returned to the program from which it was paid as prescribed by federal regulation in the following order:

1. Federal Unsubsidized Direct Loan
2. Federal Subsidized Direct Loan
3. Federal Plus Loan
4. Federal Pell Grant
5. Federal SEOG Grant

Official Withdrawal: When the student officially withdraw from all courses after the semester begins, the Financial Aid Office will use the withdrawal date to determine the portion of the Federal Title IV aid earned (or could have earned) to be used to pay institutional charges such as tuition and fees. Any unearned funds will be returned to the appropriate financial aid source.

Unofficial Withdrawal: A student is said to be unofficially withdrawn if they stop attending and do not receive a passing grades in all of their courses. For a student who has been determined to have unofficially withdrawn, the date of withdrawal for purposes of the Return of Title IV refund calculation will be the last date of attendance recorded by the faculty at grading.

Timeframe for R2T4 calculation: Federal regulations require the college to calculate the Return of Title IV refunds within 45 days of determining an official or unofficial withdrawal date.

Post Withdrawal Disbursement: In some cases, a student may withdraw from all courses before aid has been disbursed. If the amount disbursed to the student is less than the amount the student earned, and for which the student is otherwise eligible, he/she is entitled to receive a post-withdrawal disbursement of the earned aid that was not received. The amount earned is determined as part of the required federal Return of Title IV Funds calculation.

Financial Aid and Satisfactory Academic Progress

In addition to meeting and maintaining the standards set forth in the college Satisfactory Academic Progress Policy, student recipients of financial aid must complete their degree, diploma or certificate within a maximum allowable period of time.

Measuring the time period: All students must complete their degree, diploma or certificate within 150 percent of the published length of the program (e.g. 60 credit programs must be completed within 90 attempted credits). When it becomes clear that a student cannot complete the program within the maximum allowable period, the student becomes ineligible for financial aid.

Seeking a second degree, diploma or certificate: The credits a student has earned in the successful completion of a degree, diploma or certificate program shall not be counted in the maximum time period calculation for a subsequent program, excepting for those credits which apply to both programs.

Changing programs prior to completion: Students who change programs (majors) without successfully completing a program shall remain subject to the 150 percent rule.

Appeals: Students may appeal the suspension of financial aid for exceeding the maximum allowable time frame based on special circumstances. The appeal form can be minnesota.edu/forms.
Student Information

Academic Advising
Academic advising is a teaching and learning process focused on student success. Students partner with their academic advisor to develop a plan for achieving their academic and career goals. The desired outcome of academic advising is that students learn to make informed and increasingly independent decisions about their educational plans and other academic issues.

Academic planning is a continual process during a student’s enrollment at M State. Current students meet at least once each semester with their academic advisor to review their Degree Audit Reporting System (DARS) audit, discuss educational goals, determine progress toward graduation and receive their access code to register for the next semester. Students should schedule an appointment with their assigned academic advisor and bring a copy of their DARS report and sample schedule to their advising session.

There are two types of academic advisors at M State, program advisors and professional advisors. Each admitted student is assigned an advisor based on his or her program of study.

Program advisors
• Advise students enrolled in technical/career programs

Professional advisors
• Advise all Liberal Arts & Sciences - Associate of Arts (AA) students
• Advise students completing the Minnesota Transfer Curriculum (MnTC)
• Advise candidates for programs with selective admission (e.g. criminal justice, dental assisting, dental hygiene, nursing and radiologic technology)
• Advise Engineering - Associate of Science (AS) students
• Advise students who are undecided or undeclared

Detroit Lakes:
Kristina Seifert, 218.846.3734, kristina.seifert@minnesota.edu
Mark Nelson, 218.846.3670, mark.nelson@minnesota.edu

Fergus Falls:
Jennifer Bieniek, 218.736.1533, jennifer.bieniek@minnesota.edu
Laura Baier, 218.736.1533, laura.baier@minnesota.edu

Moorhead:
Michele Burns, 218.299.6804, michele.burns@minnesota.edu
Penny Brynildson, 218.299.6880, penny.brynildson@minnesota.edu
Kristin Nelson, 218.299.6886, kristin.nelson@minnesota.edu
Joni Massie, 218.299.6590, joni.massie@minnesota.edu

Wadena:
Suzie Rethemeier, 218.631.7800, suzie.rethemeier@minnesota.edu

Bookstores
M State has a bookstore at each campus location, along with an online bookstore for online courses, where students can purchase textbooks, school-related supplies and M State apparel. Bookstores are usually open Monday through Friday during the academic year, with special hours during the first week of each semester, holidays and Summer Semester. Credit cards and personal checks are accepted.

Textbook Rental Program
M State’s bookstores also offer the option of textbook rental. Textbooks eligible for rent may vary by store and semester. Rental fees can be charged to student accounts against financial aid, payment plans and other types of funding. For more information, see M State’s Textbook Rental Agreement on the About the Bookstores webpage, minnesota.edu/bookstore.

Textbook Return Information
Textbooks and course-related items purchased in fall and spring semesters may be returned with original receipt within the first five (5) business days of the semester while those items purchased for Summer session and late starting classes may be returned within three (3) business days from the start of the class. Textbooks and course related items purchased after the refund period may only be returned if within 24 hours and with the original receipt and in new condition.

Books, course-related items and non-course related items will be refunded in full if they are in new, resalable condition. New books returned that are not in new condition may be refunded at the used book price, or 75 percent off new price if a used price is not listed in the POS System under any campus. Defective items must be exchanged within the same semester of purchase. Non-returnable items include: bundled e-books, software, special orders, seasonal and clearance merchandise. Refunds on credit card purchases will be issued to the credit card used at time of purchase and must present original receipt.

Refunds on cash or check purchases will be issued a check within seven business days or can choose to receive a store gift card. Refunds on purchases charged on account will be refunded to the student’s account. The bookstore staff reserves the right to access the condition of all returned items and may make exceptions at their sole discretion.

In addition to processing returns, each campus bookstore offers book buybacks at the end of fall and spring semesters.

Please contact your campus bookstore with specific questions:
Detroit Lakes: 218.846.3727
Fergus Falls: 218.736.1556
Moorhead: 218.299.6570
Wadena: 218.631.7825
Online: 218.846.3800

Bulletin Boards
Bulletin boards are specified on each campus for general use, while others are for office or faculty use only. All bulletins are to be placed on regular bulletin boards only.

Campus Dining
Each campus has a dining service and vending machines that offer a variety of snacks, light meals and entrees. Dining services are open Monday through Friday during the regular academic year. Each dining service can provide information about pre-pay options and may be available to cater events on request.

Child Care
Child care resource information may be available from the Student Development Services office at each campus. Contact Child Care Resource and Referral for information about child care options in specific communities. Minnesota Child Care Resource and Referral can be reached at 1.888.291.9811 or parentaware.org. North Dakota Child Care Resource and Referral can be contacted at 800.997.8515 or ndchildcare.org.
Consumer Information

The college, in compliance with Title IV of the Educational Amendments of 1976 to the Higher Education Act and subsequent federal legislation, will provide and disseminate consumer information to all prospective and enrolled students. This information shall include but not be limited to the following: admission requirements, financial aid programs, costs, job placement, probation/suspension policy and refund policy.

College Social Workers

The college social workers assist in the navigation of community and college resources to overcome barriers that are non-academic. College social workers have knowledge of available services and benefits and the ability to guide students through the social service systems.

Barriers that students may be assisted with may include, but are not limited to: transportation, housing, finances, legal, health/wellness/food/nutritional needs and safety.

Social Workers

Detroit Lakes campus: Kayla Simon 218.846.3687
Moorhead campus: Marisa Gonzalez 218.299.6839
Wadena campus: Kayla Simon 218.846.3687

Counseling Services

M State counselors assist in the total development of each student and his or her personal and life-career planning goals. College counselors strive to provide an accepting environment in a confidential setting. They can assist with career guidance, career selection, personal and life-career planning resources, short-term individual counseling and in making referrals.

Campus Counselors

Fergus Falls campus: Steve Lindgren 218.736.1641
Moorhead campus: Tom Dubbels 218.299.6516, Maronda Robertson 218.299.6618

Disability Services

M State complies fully with the provisions of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act, which prohibits discrimination in employment and public educational services on the basis of an individual’s disability. An individual with a disability is one who has or is regarded as having a physical or mental impairment which substantially limits one or more major life activities.

All M State campuses are accessible by ramps or doorways. Designated handicapped parking spaces are located near main entrances. Vehicles bearing a state handicapped license, permit or college-issued handicapped parking pass are the only vehicles allowed to park in these spaces. Temporarily disabled students (e.g. broken leg) may obtain handicapped permits for a limited time from the campus director of student services. Students need a letter of verification from a doctor for all temporarily handicapping conditions (this letter must state the approximate length of the handicapping condition) to obtain a campus-issued handicapped parking pass.

Assistive technology devices are available; see Disability Services for specific needs. Tape-recorded books, adapted testing and tutoring are provided. Information is available on note-taking, study skills, time management and developmental courses in math and composition. The college is equipped to serve students with various physical challenges.

In order to ensure equal access to the full range of collegiate experiences in the most integrated setting possible, the college provides a wide range of supplemental services. Students who provide the college with a recent assessment documenting a disability and apply for services may receive the following special services:

- Support, counseling and information about assessment and referral services;
- Academic assistance including testing assistance, note takers, assistive devices and tutoring;
- Advocacy services that may include assistance from a disability services coordinator for students needing services, assistance in working individually with faculty and administrators, intervention procedures and grievance procedures.

Disability Services Coordinators:

Detroit Lakes Campus: Kristina Seifert, 218.846.3734
Fergus Falls Campus: Jon Kragness, 218.736.1595
Moorhead Campus: Claudia Simon, 218.299.6882
Wadena Campus: Christian Brecinski, 218.631.7832

Emergency/Weather Closings and Drills

If a weather emergency situation develops, campus officials will consult with local authorities, including law enforcement officials, to determine whether to cancel classes or to close a campus. Campus closings or class cancellations are announced at minnesota.edu, emergency text messaging service and on local and regional television and radio stations.

Emergency drills are held periodically during the school year. Information regarding emergency evacuation of buildings is posted throughout each campus. In the case of a tornado warning, please go immediately to a designated Safe Area.

The Star Alert emergency notification system alerts students and staff if a campus is closed or if classes are delayed or cancelled. It will be in place at every Minnesota State institution, so students who attend more than one campus may choose to receive Star Alerts from each. Sign up for Star Alert through SpartanNet.

Employment Information

Students seeking part-time employment on campus are urged to contact the financial aid office. Off-campus employers provide information to each campus about local part-time opportunities available for students. The information is posted at careers.minnesota.edu.

Health Services/Insurance

Students are encouraged to carry some type of health coverage while attending school. Group health insurance is available to all M State students. (NOTE: Students should check coverage within their family insurance programs.) Information and applications for student health and dental insurance may be obtained from Student Services. International students are required to purchase a Minnesota State International Student Medical Insurance Policy. Health and accident insurance is the responsibility of the student. Student injuries that occur during class time are the responsibility of the student, not the college.

The college does not assume responsibility for any illness or accident to a student. The student is responsible for making financial arrangements for costs that are incurred at any health care facility. All accidents are reported. If there is an accident or illness in a classroom or laboratory, an ambulance may be called to transport the student to a local emergency room. All campus laboratories are equipped with first aid kits, eyewash and showers for first aid treatment of minor injuries.

Intercollegiate Athletics

M State offers a variety of athletic program on the Fergus Falls campus. Athletic programs are open to all M State students. M State is a member
of the Minnesota College Athletic Conference (MCAC), whose mission advances intercollegiate athletics by providing an engaging and supportive environment for success of our student athletes and competition among member institutions.

For additional information see the Intercollegiate Athletics policy at minnesota.edu/policies.

Laptops

Some M State majors and programs require that students possess adequate computing resources. These requirements can be met with a student-owned laptop or a laptop procured through a lease with a vendor; however, the minimum hardware specifications and general software requirements must be met to accommodate general communication, research and specific program computing activities needed for that program or major.

Annually the college Information Technology Services Department identifies minimum hardware requirements for a laptop and required general software to meet all programs and majors. These hardware and software requirements are available from each campus Computer Help Center and available on our college website. Due to the changing nature of curriculum, software and course sequencing, the college will not endorse an alternate specification. Students interested in using alternate specifications are strongly advised to consider the numerous changing variables that may affect their computing needs throughout their program of study prior to leasing or purchasing an alternate specification. Limited IT resources may result in not possessing adequate computer and software resources.

All students are required to:

- On request, produce proof of licensure for all software installed on the computer, and
- Register their computer or mobile device with the Computer Help Center to gain access to campus IT resources.

Information about academic programs requiring laptops can be found at: minnesota.edu/?id=521.

All students using their own laptop computers or campus computer labs are subject to the rights and responsibilities of M State Acceptable Use of Computers and Information Technology Resources Policy. Click here to learn more about laptop information.

Library Services

The four M State libraries located on the Detroit Lakes, Fergus Falls, Moorhead and Wadena campuses contain thousands of books, magazines, journals, videos, DVDs and CDs.

The library catalog can help students find books and other resources on all four M State campuses and at all state colleges and universities. Several private college library catalogs and the University of Minnesota library catalog can be accessed using the M State library catalog as well. It also provides access to thousands of full-text reference books online. In addition, the electronic periodical databases on the library page provide access to many full-text periodicals. Both the library catalog and electronic periodical databases can be accessed off campus. The library catalog can also be used to renew library materials and check on accounts.

Lost and Found

Collection points for lost and found items are located in Student Development Services on the Detroit Lakes, Fergus Falls and Wadena campuses and in the library in Moorhead.

M State Official Colors

The official institutional colors for M State are blue, green and gold. The official team colors for M State’s Spartan athletics are blue and gold. Specific guidelines for how and when the institutional and athletic colors may be used can be found in the Branding Guide for Identity and Graphics Standards at minnesota.edu/communications.

Representing the College

Students and student groups should not imply or state that they represent the college unless specifically authorized to do so.

Computer Help Center

Tech Support

For all your IT-related questions, including D2L, please submit a ticket using our IT Help link within the SpartanNet portal. Once you click on Tech Support, you can search our knowledgebase to troubleshoot your own problem, or submit a ticket for assistance from our many tech specialist.

The hours for the Computer Help Center on the Detroit Lakes, Fergus Falls and Wadena campus’ are 8 a.m. - 4:30 p.m. and the Moorhead campus hours are Monday, Wednesday, Thursday and Friday 7:30 a.m. to 5 p.m. and Tuesday from 7:30 a.m. to 6 p.m.

Software and Printing

M State participates in the Microsoft Campus Agreement and makes available to all currently enrolled students the free download of Office 365. This free download allows students to install Word, Excel, PowerPoint, Publisher, Access and more on their own personal devices which includes up to five PCs or Macs and five tablets or mobile devices. For more information on how to download the Office 365 software, students can login to their SpartanNet Portal or contact their local CHC.

At the start of each semester, a student’s network account receives a printing balance of $12.50. This equates to about 250 sheets of free printing to the campus networked printers. These free balances are not carried from semester to semester and cannot be transferred. Additional printing can be purchased at the printing kiosks on each campus. Printing costs are 5 cents for black & white and 11 cents for color. NOTE: Additional printing that is purchased does carry over from semester to semester as long as the student is continuously enrolled. However there are no refunds issued for printing balances when a student leaves M State. Student printing balances can be viewed in the SpartanNet portal.

SpartanNet

SpartanNet is the one-stop site where M State students can access all their college resources including D2L Brightspace, email, eServices, tech support, print balances and The Source.

Student Clubs and Activities

M State believes student activities and organizations promote the complete development of students and help motivate students to enroll in and continue in college. Through the number and variety of activities and organizations, all students have the opportunity to participate in extracurricular programs. The student life budget supports the expenses of approved student body activities.

All student club membership and activities are governed by the Student Code of Conduct. Anyone interested in establishing a student organization should contact the director of student engagement/director of student life.

Student Clubs

ADN Organization - Fergus Falls
Supports students in the Associate Degree nursing program

Architectural Technology Student Association - Detroit Lakes
Provides a greater understanding of architectural practice
Auto Tech Club - Moorhead
Encourages student interest in automotive careers

Business Professionals of America - Moorhead
Helps prepare students for careers in business and information technology

Campus Crusade for Christ - Fergus Falls
Explores issues related to faith, spirituality and Christianity

Christian Bible Fellowship - Moorhead
A Christian Bible study for students

Construction Management Student Organization - Moorhead
 Provides co-curricular opportunities for students with an interest in construction management

Cosmetology Club - Wadena
Encourages, develops and promotes professionalism and leadership among cosmetology students

Criminal Justice Association - Moorhead
Promotes an interest in the criminal justice program

Dental Assisting - Moorhead
Supports students in the dental assisting program

Diesel Club - Moorhead
Supports diesel students and their interests

Electrical Line Workers Organization - Wadena
Promotes professional growth among electrical line worker students

EquiUs (Equine Club) - Fergus Falls
For students interested in the equine industry for a career or as a hobby

F2CO - Fergus Falls
Encourages interest in chemistry

Fine Arts - Fergus Falls
Chamber Chorale, Concert Band, Jazz Band and Theater

Gaming Club - Fergus Falls
For gaming enthusiasts of all types, especially those interested in strategy games

Intercollegiate athletics - Fergus Falls
Football, volleyball, basketball (men’s and women’s), baseball, softball and golf (men’s and women’s)

Intramural Sports - Fergus Falls, Moorhead
Activities can include basketball, volleyball, flag football, soccer and bowling

Multicultural Student Association - Moorhead
Enhances knowledge and awareness of diverse cultures

Phi Theta Kappa (PTK) - Detroit Lakes, Fergus Falls, Moorhead
Academic honor society

Powersports Technology Club - Detroit Lakes
Lets members share their passion for the power sports industry

Skills USA - Detroit Lakes, Moorhead
Official organization of vocational education with state and national competitions

Student American Dental Hygienists Association - Moorhead
Supports students in the dental hygiene program

Student Government Association - Detroit Lakes, Fergus Falls, Moorhead
Provides a student voice in college administration

Student Human Resource Organization - Moorhead
Expands experience in the human relations and business fields

Student Nursing Organization – Moorhead
Provides growth and leadership for those interested in nursing careers

Technology, Gaming and Robotics - Moorhead
Provides opportunities for hands-on projects related to technology, gaming and robotics

To learn more about opportunities to get involved in student life activities or the clubs offered at M State, visit minnesota.edu/student-life for current information.

Student Email
Email is the official means of communication at M State. All students are automatically issued an email address once their StarID account has been created. Students are expected to check their email on a daily basis or at a minimum have their college email forwarded to an account they do check. M State is not responsible for email lost due to forwarding rules. Student email addresses are in the format of: firstname_lastname@my.minnesota.edu. To access your email, login to SpartanNet and click the email tab. Submit a Tech Support ticket if you have issues.

Student Housing
Housing arrangements are the responsibility of individual students, although each M State campus may maintain information about community and on-campus housing options. Please contact your campus for more information.

M State Fergus Falls Housing
On-campus housing is available on the Fergus Falls campus. Students wishing to live on campus can choose from two apartment-style complexes, College Manor or Williams Hillside Village. Both complexes are furnished and house four students in each apartment. The college recommends on-campus living as a positive collegiate experience. These housing facilities are substance free, including alcohol and tobacco, regardless of the age of residents.
Student Rights and Responsibilities

In accordance with Minnesota State system Board Policy 3.1 Student Rights and Responsibilities, the college shall provide students with the system outlined rights and responsibilities as described below. The college believes these student rights are essential components of academic life. The college asserts that students play a critical role in creating an educational atmosphere that supports these rights for all members of the academic community; thus, we expect students to exercise these freedoms with responsibility.

For complete details, please review the Student Rights and Responsibilities policy at minnesota.edu/policies.

Student Identification Cards

The student identification card is the required form of identification for M State students. The college issues a photo identification card to students attending on-campus courses after students complete their initial registration. Online and concurrent students will receive a non-photo college identification card via mail after registering for classes. Students must show their identification cards for admission to various college events, to vote in student elections, to check out library materials, to conduct transactions in the Business Office and for other purposes as required by the college. If an identification card needs to be replaced for any reason, students may obtain a replacement identification card for a fee.

New identification cards are not needed every year. ID cards can be updated for the current year with a sticker that can be obtained from the libraries on the Detroit Lakes and Wadena campuses. In Fergus Falls, the sticker can be obtained from the Spartan Service Center. If an identification card needs to be replaced for any reason, students may obtain a replacement identification card for a fee.

Student Lockers

A limited number of lockers are available to students on the Detroit Lakes, Moorhead and Wadena campuses. Locker services are extended as a convenience to students. Students must keep lockers in good condition. Students may place a lock on the locker at their expense. The college reserves the right to inspect lockers at any time. If the college needs to enter a locker when the student is not available or does not wish to be available, the college reserves the right to remove the lock at the lock owner’s expense. The college is not responsible for lost or stolen articles/items. Contact Student Development Services for questions about locker services.

Student Right To Know

It is the policy of the college to annually prepare and make available to all enrolled and prospective students, statistics on completion or graduation rates, transfer-out rates and employment, pursuant to the Student Rights To Know Act of 1990. This information is made available through appropriate publications, mailings and the college website.

Student Services Appeals

Students may appeal any student services issue and discuss it with the appropriate employee(s) or administrator(s) as established by college policy or procedure. Students have the right to seek remedy through the college’s designated student services appeal process. Students should use available informal means (direct conversation) to resolve disputes before filing an appeal. There will be no retaliation of any kind against students, faculty or staff who participate in the appeal process. For more information about filing an student services appeal, contact Student Development Services.

Theatre Productions

Theatre productions are an important part of student life on the Fergus Falls campus. During the academic year, students have the opportunity to participate in two mainstage productions. Student involvement takes place both on the stage and behind the scenes. Productions are chosen to spotlight student talent and to offer a variety of theatrical genres, including musical theatre in conjunction with the Music Department. Smaller productions may occur during the year as well, such as radio plays, madrigals and experimental productions.

Transcript Requests

Official transcript requests are fulfilled at no charge. The Transcript Request form is available at minnesota.edu/forms. For privacy reasons, this form must be completed and electronically signed by the student in order for a transcript request to be processed. Students transferring to or from another Minnesota State system campus do not need to submit a transcript request, unless the student’s records are not available electronically.

Travel Abroad

The college occasionally offers students a study/travel abroad program through which students register for selected spring semester courses that are tied to a trip overseas at the end of spring semester. The credits taken for both the spring semester course work and the field experience apply to the transfer portion of the Associate in Arts degree. The courses and the cost of the program are announced during the fall semester.

Visual Arts

As part of Minnesota’s 1984 “Percent for Art” legislation, M State works to use up to 1 percent of the total construction budget to purchase or commission original art work for building projects costing $500,000 or more. M State campuses strive to select art work that reflects the region’s culture, history and diversity.

The Fergus Falls campus has long been committed to the visual arts through course offerings, exhibits in the Waage Gallery and the Charles Beck Gallery, and a permanent collection of more than 400 works displayed prominently throughout the campus. The collection began when faculty member Charles Beck encouraged students to leave a work of art for the college. Through budgeted funds and gifts to Fergus Area College Foundation, the college also has purchased the work of regional artists for its permanent collection.

The Moorhead campus Art Fund was created in 2006 as part of a State College and University Awards for Excellence faculty award to former M State art instructor Pamela Sund. The focus of the collection on the Moorhead campus is to acquire art works that represent a variety of art traditions from the Western world, especially American traditions, and world traditions that represent diverse cultures, especially those cultures represented by the M State student population and the multicultural populations in our region.
Transfer Articulation Agreements Table 2017-2018  
(for students following specified AS, AAS, diploma or certificate programs)

Minnesota State Community and Technical College has formed articulation agreements with a number of public and private institutions to assist students with their transfer goals. These agreements facilitate credit transfer and provide a smooth transition from one related program to another. Please see a transfer specialist for additional information. Additional general education credits will likely be required to complete a degree. The number of credits that transfer may vary depending on the program. Note: Students are free to explore transfer to any college, including colleges not listed in the following table; however, the number of credits that transfer may be more limited. For up-to-date information, view articulation agreements online at www.mntransfer.org. Enter the Student Portal>Transfer Planning>Articulation Agreements.

<table>
<thead>
<tr>
<th>M State Program</th>
<th>M State Degree</th>
<th>Transfer Program</th>
<th>Transfer Degree</th>
<th>Institution</th>
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<tr>
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<td>Architectural Drafting and Design</td>
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IT’S ALL ABOUT CHOICES.

Ready to start or advance your career in two years or less? Want to complete the first two years of your four-year degree? Looking for the flexibility of online courses? M State can fit your life.

**PROGRAM/MAJOR**

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**Agriculture, Food and Natural Resources**

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| Equine Science | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ |
| Fundamentals of Culinary Arts | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ | ⬤ |

Degrees:

**Associate of Arts (AA)** degree is designed for transfer to a four-year institution. The AA degree requires students to complete the Minnesota Transfer Curriculum. Ask a college admissions counselor for details about your choice of major.

**Associate in Science (AS)** degree is awarded for the successful completion of a program which transfers to a baccalaureate major in a scientific or technical field. Program includes a minimum of 30 general education courses.

**Associate in Applied Science (AAS)** degree is a combination of technical credits and a minimum of 15 general education credits. M State has articulation agreements with some four-year institutions that allow transfer of a wide range of credits.

**Associate in Fine Arts (AFA)** degree is designed to provide a means for music and visual art students to pursue a path with seamless transition to a four-year music or visual arts degree and to be best prepared for a degree and/or career in music or the visual arts.

**Diploma** is the vocational degree awarded upon completion of a technical program. Studies include technical credits with 3-9 general education credits.

**Certificate** is awarded upon completion of a program requiring 30 or fewer credits.
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<td>86 Heating Ventilation Air Conditioning and Refrigeration</td>
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### PROGRAM/MAJOR

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<th>Moorhead</th>
<th>Wadena</th>
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<td>101 Early Childhood and Paraprofessional Education</td>
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Visit minnesota.edu/programs for the most current list of M State programs and degrees.

* Other column indicates color-coded alternative delivery options.

- Classroom capture
- Telepresence
- On-campus and online hybrid
- Off-campus site
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See Health Science Technology

Biological Sciences Ecology and Evolutionary Biology Emphasis AS ......................... 92
See Health Science Technology

Biology Transfer Pathway AS ...................................... 92
See Health Science Technology

Criminal Justice AS ..................................................... 100
See Human Services

Engineering AS .......................................................... 86
See Engineering, Manufacturing and Technology

Environmental Science AS ........................................... 60
See Agriculture, Foods and Natural Resources

Human Resources AS ................................................... 77
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Liberal Arts and Sciences - Social Work Emphasis AA ........................................... 55

Liberal Arts and Sciences - Sociology Emphasis ................................................... 55

Individualized Studies .................................................. 55

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Theatre AFA ................................................................. 67
See Arts, Communication and Computer/Information Systems

Theatre Transfer Pathway AFA ......................................... 67
See Arts, Communication and Computer/Information Systems

Visual Arts AFA ........................................................... 67
See Arts, Communication and Computer/Information Systems
**Associate of Arts (AA) Degree:**

**REQUIREMENTS**

The Liberal Arts and Sciences AA degree forms the foundation of a traditional liberal arts education and will satisfy a large portion of the general education course requirements for bachelor’s degrees at four-year colleges and universities. The degree is the basic graduation award toward which most students will work if they intend to transfer. It emphasizes a broad general education. In order to obtain an AA degree, students must complete the following requirements:

- Successful completion of a minimum of 60 semester credits numbered 1000 or above.
- Achieve an overall GPA of 2.00 and a GPA of 2.00 within the Minnesota Transfer Curriculum (MnTC).
- Earn at least 20 of the 60 credits at M State.
- Complete a minimum of 40 credits from the MnTC and fulfill individual requirements in each of the ten MnTC goal areas.

Students may satisfy the MnTC requirement with a variety of courses and credits. Some courses will meet more than one of the ten (10) required goal areas. Fulfilling the minimum requirements in each goal area may not satisfy the 40-credit minimum. Some additional credits beyond the minimum requirements in goals 1-10 could be needed to achieve the overall 40-credit MnTC requirement. Students should carefully review and monitor their progress.

In order to be certified as having met all the requirements of the college’s Minnesota Transfer Curriculum (MnTC), a student must successfully complete courses as prescribed in the following Liberal Arts and Sciences education distribution areas with a minimum GPA of 2.00. Transfer courses with grades of A-D will be included in the GPA calculation for the MnTC.

### AREA 1: Communication

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>COMM 1100</td>
<td>Communication and Effective Human Relations</td>
<td>1</td>
</tr>
<tr>
<td>COMM 1120</td>
<td>Introduction to Public Speaking</td>
<td>1</td>
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<tr>
<td>COMM 1130</td>
<td>Small Group Communication</td>
<td>1</td>
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<tr>
<td>COMM 1140</td>
<td>Interpersonal Communication</td>
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<tr>
<td>ENGL 1215</td>
<td>Professional and Technical Writing</td>
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<tr>
<td>ENGL 2321</td>
<td>Women in Literature</td>
<td>1, 2, 6, 7</td>
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</table>

### AREA 2: Critical Thinking

Complete a minimum of six credits from at least two different discipline areas

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<tbody>
<tr>
<td>ART 1123</td>
<td>Global Art History: Asian, Islamic, African, Mesoamerican</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 1104</td>
<td>Biology of Human Concerns</td>
<td>2, 3</td>
</tr>
<tr>
<td>BIOL 1107</td>
<td>Environmental Science Issues</td>
<td>2, 3, 10</td>
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<tr>
<td>BIOL 1108</td>
<td>Environmental Science Issues Lab</td>
<td>2, 3, 10</td>
</tr>
<tr>
<td>CHEM 1111</td>
<td>General Inorganic Chemistry I</td>
<td>2, 3</td>
</tr>
<tr>
<td>CHEM 1112</td>
<td>General Inorganic Chemistry II</td>
<td>2, 3</td>
</tr>
<tr>
<td>CHEM 1115</td>
<td>Introduction to Organic and Biochemistry</td>
<td>2, 3</td>
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<td>CHEM 2224</td>
<td>Organic Chemistry I</td>
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<td>COMM 1130</td>
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<td>CSCI 1110</td>
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<tr>
<td>ECON 1150</td>
<td>Essentials of Economics</td>
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<td>ECON 2210</td>
<td>Macroeconomics</td>
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<td>ECON 2222</td>
<td>Microeconomics</td>
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<tr>
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<td>Environmental Literature</td>
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### AREA 3: Natural Sciences

Complete a minimum of six credits; at least one course must include a lab (“L” denotes lab course)

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<tbody>
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<td>BIOL 1102</td>
<td>Introduction to Horticulture</td>
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<tr>
<td>BIOL 1104</td>
<td>Biology of Human Concerns</td>
<td>2, 3</td>
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<tr>
<td>BIOL 1107</td>
<td>Environmental Science Issues</td>
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<tr>
<td>BIOL 1108</td>
<td>Environmental Science Issues Lab</td>
<td>2, 3, 10</td>
</tr>
<tr>
<td>BIOL 1115</td>
<td>Introduction to Biotechnology</td>
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<tr>
<td>BIOL 1152</td>
<td>Food Science</td>
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<tr>
<td>BIOL 1161</td>
<td>Introduction to Freshwater Biology</td>
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<td>BIOL 2265</td>
<td>Diagnostic Microbiology</td>
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<td>General Inorganic Chemistry I</td>
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<tr>
<td>CHEM 1112</td>
<td>General Inorganic Chemistry II</td>
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<td>CHEM 1115</td>
<td>Introduction to Organic and Biochemistry</td>
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<td>CHEM 2224</td>
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<td>CHEM 2225</td>
<td>Organic Chemistry II</td>
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<td>GLST 1510</td>
<td>Global Studies: Natural Science</td>
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<td>PHYS 1106</td>
<td>Fund of Physics - 100's</td>
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<tr>
<td>PHYS 1141</td>
<td>University Physics I</td>
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<tr>
<td>PHYS 1142</td>
<td>University Physics II</td>
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### AREA 4: Mathematics/Logical Reasoning

Complete a minimum of three credits

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<tr>
<td>MATH 1114</td>
<td>College Algebra</td>
<td>2, 4</td>
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<tr>
<td>MATH 1115</td>
<td>Functions/Trigonometry</td>
<td>2, 4</td>
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<td>MATH 1116</td>
<td>College Trigonometry</td>
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<tr>
<td>MATH 1118</td>
<td>Precalculus</td>
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<tr>
<td>MATH 1122</td>
<td>Applied Calculus and Linear Algebra</td>
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<tr>
<td>MATH 1134</td>
<td>Calculus I</td>
<td>2, 4</td>
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<td>MATH 1135</td>
<td>Calculus II</td>
<td>2, 4</td>
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<tr>
<td>MATH 1207</td>
<td>Elementary Statistics</td>
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<td>MATH 1213</td>
<td>Introduction to Statistics</td>
<td>2, 4</td>
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<tr>
<td>MATH 2200</td>
<td>Principles of Arithmetic</td>
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<td>MATH 2231</td>
<td>Calculus III</td>
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<td>MATH 2257</td>
<td>Linear Algebra</td>
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<tr>
<td>PHYS 2235</td>
<td>Symbolic Logic</td>
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### AREA 5: History and the Social and Behavioral Sciences

Complete a minimum of nine credits from at least two different discipline areas

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<td>ANTH 1100</td>
<td>Introduction to Anthropology</td>
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<tr>
<td>ECON 1150</td>
<td>Essentials of Economics</td>
<td>2, 5</td>
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<td>ECON 2210</td>
<td>Macroeconomics</td>
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<tr>
<td>ECON 2220</td>
<td>Microeconomics</td>
<td>2, 5, 9</td>
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<tr>
<td>GEOG 1110</td>
<td>World Geography</td>
<td>5, 8</td>
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<tr>
<td>HIST 1100</td>
<td>Western Civilization: Ancient-1600's</td>
<td>5, 8</td>
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<tr>
<td>HIST 1110</td>
<td>Western Civilization: 1400's-1600's</td>
<td>5, 8</td>
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<tr>
<td>HIST 1112</td>
<td>Western Civilization: 1600's-1800's</td>
<td>5, 8</td>
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<td>HIST 1113</td>
<td>Western Civilization: 20th Century</td>
<td>5, 8</td>
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<tr>
<td>HIST 1500</td>
<td>European Experience</td>
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<tr>
<td>HIST 1600</td>
<td>History of Baseball</td>
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<tr>
<td>HIST 2211</td>
<td>American History: The Colonial Period</td>
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<tr>
<td>HIST 2212</td>
<td>American History 19th Century</td>
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<tr>
<td>HIST 2213</td>
<td>American History: 20th Century</td>
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<td>MCOM 1122</td>
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<tr>
<td>PHIL 2300</td>
<td>Political and Social Philosophy</td>
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<td>PSYC 2226</td>
<td>Behavior and Environmental Management</td>
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<td>SOC 1111</td>
<td>Introduction to Sociology</td>
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<tr>
<td>SOC 2110</td>
<td>Social Deviance</td>
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<tr>
<td>SOC 2213</td>
<td>Sociology of the Family</td>
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<td>SOC 2215</td>
<td>Criminology</td>
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<tr>
<td>SOC 2216</td>
<td>Minority Group Relations</td>
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<tr>
<td>SOC 2217</td>
<td>Rural Sociology</td>
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<tr>
<td>SOC 2220</td>
<td>Food, Culture and Society</td>
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</tr>
<tr>
<td>SOC 2222</td>
<td>Sociology of Agriculture</td>
<td>5, 7</td>
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<tr>
<td>WMST 1130</td>
<td>Introduction to Women's Studies</td>
<td>5, 7</td>
</tr>
</tbody>
</table>

### AREA 6: The Humanities and Fine Arts

Complete a minimum of nine credits from at least three different discipline areas; a maximum of three Fine Arts credits may be utilized (“F” denotes Fine Arts courses)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ART 1121</td>
<td>World of Art</td>
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</tr>
<tr>
<td>ART 1122</td>
<td>World of Art II</td>
<td>6, 8</td>
</tr>
<tr>
<td>ART 1123</td>
<td>Global Art History: Asian, Islamic, African, Mesoamerican</td>
<td>2, 6</td>
</tr>
<tr>
<td>ART 1124</td>
<td>American Art</td>
<td>6</td>
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<tr>
<td>ART 1141</td>
<td>Ceramics I</td>
<td>6</td>
</tr>
<tr>
<td>ART 2241</td>
<td>Advanced Ceramics</td>
<td>6</td>
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<tr>
<td>ART 2260</td>
<td>Art, Portfolio Design and Professional Development</td>
<td>6</td>
</tr>
<tr>
<td>COMM 2220</td>
<td>Oral Interpretation</td>
<td>6</td>
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<tr>
<td>ENGL 2200</td>
<td>Introduction to Creative Writing</td>
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<tr>
<td>ENGL 2221</td>
<td>Creative Writing: Poetry</td>
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</tr>
<tr>
<td>ENGL 2222</td>
<td>Creative Writing: Fiction</td>
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</tbody>
</table>
ENGL 2223 Creative Writing: Personal Narrative 6
ENGL 2228 A Well Examined Life: Reading and Writing Memoir 6,7
ENGL 2230 Environmental Literature 2,6,10
ENGL 2234 Introduction to Literature: Short Stories 2,6,7
ENGL 2235 Introduction to Literature: Drama 2,6,8
ENGL 2237 Introduction to Literature: Short Prose 2,6,9
ENGL 2239 Nature Writers 2,6,10
ENGL 3032 Human Ethnic Literature 6,7
ENGL 2304 Introduction to Literature, Native American Focus 2,6
ENGL 2310 Introduction to Mythology 6
ENGL 2314 Introduction to Shakespeare 2,6
ENGL 2321 Women in Literature 1,2,6,7
ENGL 2322 Banned Literature 2,6,7
ENGL 2323 Horror and Supernatural Fiction 2,6
ENGL 2324 Travel Literature 2,6,10
ENGL 2327 Children’s Literature 2,6,7
ENGL 2374 The Poetics of Rock Lyrics 2,6
HUM 1105 Religion in the Humanities 6,8
HUM 1110 Native American Culture 2,6,7
HUM 1120 Culture of Italy 6,8
HUM 1132 Women in the Humanities 6,7
HUM 1134 Global Perspectives for Women 6,8
HUM 1201 Religion and the American Experience 6,7
HUM 2210 Introduction to Film 2,6
HUM 2230 World Cinema 6,8
HUM 2236 Technology in the Humanities 2,6,8
HUM 2281 Culture of the British Isles 6,8
HUM 2293 Field Experience: Europe 6,8
HUM 2295 Field Experience: The East 6,8
HUM 2301 Heroes, Moral and Cultural 2,6
MUSC 1112 Beginning Class Guitar 6
MUSC 1113 Beginning Class Voice 6
MUSC 1114 Beginning Class Piano 6
MUSC 1115 America’s Musical Heritage 6,7
MUSC 1116 World Music 6,8
MUSC 1118 Rock and Pop Music 6
MUSC 1120 Introduction to Music Technology 6
MUSC 1121 Basic Theory and Musicianship I 2,6
MUSC 1122 Basic Theory and Musicianship II 2,6
MUSC 1123 Sight Singing and Ear Training I 6
MUSC 1124 Sight Singing and Ear Training II 6
MUSC 1131 Civic Orchestra 6
MUSC 1135 Voice Ensemble 6
MUSC 1141 Concert Choir 6
MUSC 1145 Chamber Chorale 6
MUSC 1150 History of Jazz 6
MUSC 1151 Individual Voice Lessons 6
MUSC 1152 Jazz Ensemble 6
MUSC 1165 Concert Band 6
MUSC 1168 Pep Band 6
MUSC 1181 Private Instrumental Lessons 6
MUSC 1185 Private Music Composition Lessons 6
MUSC 2223 Sight Singing and Ear Training III 6
MUSC 2224 Sight Singing and Ear Training IV 6
MUSC 2231 Advanced Theory and Musicianship III 2,6
MUSC 2232 Advanced Theory and Musicianship IV 2,6
MUSC 2251 Individual Voice Lessons 6
MUSC 2281 Private Instrumental Lessons 6
MUSC 2285 Advanced Music Composition 6
MUSC 2291 Individual Piano Lessons 6
PHIL 1201 Ethics 2,6,9
PHIL 2224 Philosophy of Religion 2,6,8
PHIL 2230 Existentialism 2,6
PHIL 2240 Non-Western Philosophical Perspectives 6,8
WMST 1136 Global Perspectives of Women 6,8

AREA 7: Human Diversity
Complete a minimum of three credits
ART 1124 American Art 6,7
COMM 2230 Intercultural Communication 7
ENGL 2228 A Well Examined Life: Reading and Writing Memoir 6,7
ENGL 2234 Introduction to Literature: Short Stories 2,6,7
ENGL 2302 American Ethnic Literature 6,7
ENGL 2321 Women in Literature 1,2,6,7
ENGL 2322 Banned Literature 2,6,7
ENGL 2327 Children’s Literature 2,6,7
HIST 2212 American History 19th Century 5,7
HIST 2213 American History 20th Century 5,7
HUM 1110 Native American Culture 2,6,7
HUM 1132 Women in the Humanities 6,7
HUM 1201 Religion and the American Experience 6,7
MCS 2230 Multicultural America 7
MUSC 1115 America’s Musical Heritage 6,7
PHIL 2300 Political and Social Philosophy 5,7
SOC 1111 Introduction to Sociology 2,6,7
SOC 2210 Social Deviance 5,7
SOC 2213 Sociology of the Family 5,7
SOC 2216 Minority Group Relations 5,7
SOC 2217 Rural Sociology 5,7
SOC 2220 Food, Culture and Society 5,7
WMST 1130 Introduction to Women’s Studies 5,7

AREA 8: Global Perspective
Complete a minimum of three credits
ANTH 1100 Introduction to Anthropology 5,8
ART 1121 World of Art I 6,8
ART 1122 World of Art II 6,8
CHIN 1101 Introduction to Chinese 8
ENGL 2235 Introduction to Literature: Drama 2,6,8
GEOG 1110 World Geography 5,8
GEOG 1160 Global Physical Geography 8,10
GLST 1510 Global Studies: Natural Science 3,8
HIST 1110 Western Civilization: Ancient-1400’s 5,8
HIST 1111 Western Civilization: 1400’s-1600’s 5,8
HIST 1112 Western Civilization: 1600’s-1800’s 5,8
HIST 1113 Western Civilization: 20th Century 5,8
HIST 1150 European Experience 5,8
HIST 2211 American History: the Colonial Period 5,8
HUM 1105 Religion in the Humanities 6,8
HUM 1120 Culture of Italy 6,8
HUM 1134 Global Perspectives for Women 6,8
HUM 2230 World Cinema 6,8
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HUM 2295 Field Experience: The East 6,8
HUM 2281 Culture of the British Isles 6,8
HUM 2293 Field Experience: Europe 6,8
HUM 2295 Field Experience: The East 6,8
MUSC 1116 World Music 6,8
PHIL 2224 Philosophy of Religion 2,6,8
PHIL 2240 Non-Western Philosophical Perspectives 6,8
SPAN 2211 Intermediate Spanish I 8
SPAN 2212 Intermediate Spanish II 8
WMST 1136 Global Perspectives of Women 6,8

AREA 9: Ethical and Civic Responsibility
Complete a minimum of three credits
CSCI 1110 Informatics 2,9
ECON 2222 Microeconomics 2,5,9
ENGL 2321 Introduction to Literature: Short Prose 2,6,9
MCOM 1122 Introduction to Mass Communication 5,9
PHIL 1200 Applied and Professional Ethics 2,9
PHIL 1201 Ethics 2,6,9
PHIL 2220 Environmental Ethics 9,10
PHIL 2225 Bioethics 2,9
PSYC 1500 Positive Psychology 5,9
SOC 1113 Social Problems 5,9

AREA 10: People and the Environment
Complete a minimum of three credits
BIOI 1107 Environmental Science Issues 2,3,10
BIOI 1108 Environmental Science Issues Lab 2,3,10
BIOI 1161 Introduction to Freshwater Biology 3,10
ENGL 2220 Environmental Literature 2,6,10
ENGL 2229 Nature Writers 2,6,10
ENGL 2324 Travel Literature 2,6,10
GEOG 1160 Global Physical Geography 8,10
PHIL 2220 Environmental Ethics 9,10
PSYC 2222 Behavior and Environmental Management 2,5,10
### Liberal Arts & Sciences — Associate of Arts Degree (AA) — 60 credits

#### Minnesota Transfer Curriculum (MnTC) — 40 credits

The AA and/or the MnTC satisfy the general education requirements of Minnesota State system.

**Associate in Arts Degree (AA)**
- Requires completion of all 10 goal areas below with a minimum of 40 credits from MnTC and elective credits to bring the total to 60. A degree is awarded after successful completion of the 60 required credits.

**For certification of Minnesota Transfer Curriculum (MnTC)**
- Requires completion of all 10 goal areas below with the 40 credit minimum from MnTC. Additional electives are not required. While a degree is not awarded at the completion of the 40 credits, a student’s transcript will indicate completion of the MnTC.

#### Area 1: Communication (9 credits)
Prep courses may be needed; see your advisor.

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Subtotal</th>
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</thead>
<tbody>
<tr>
<td>ENGL 1101 (3 cr)</td>
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</tr>
<tr>
<td>ENGL 1205, 1210 or 1215 (3 cr)</td>
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<tr>
<td>COMM 1120, 1130 or 1140 (3 cr)</td>
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#### Area 2: Critical Thinking (select 6 credits from 2 disciplines)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Subtotal</th>
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</thead>
</table>

#### Area 3: Natural Sciences (6 credits, at least one course must include a lab)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Subtotal</th>
</tr>
</thead>
</table>

**Notes:**
- A minimum of 40 credits required to this point. *Important: Fulfilling the minimum requirements for each area will total 36 credits only. 4 additional credits in Areas 1-10 are required.

**Elective credits to bring total to 60**

<table>
<thead>
<tr>
<th>Course</th>
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<th>Subtotal</th>
</tr>
</thead>
</table>

#### Area 4: Mathematics/Logical Reasoning (3 credits)
Prep courses may be needed; see your advisor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Subtotal</th>
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</thead>
</table>

#### Area 5: History and the Social and Behavioral Sciences (9 credits from 2 or more disciplines)

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
<th>Subtotal</th>
</tr>
</thead>
</table>

**Elective Credits**

**General Education Credits**

**Total Credits (60 required)**

#### Area 6: The Humanities and Fine Arts (9 credits from 3 different disciplines. A maximum of 3 Fine Arts credits may be used. Fine Arts credits are denoted as 6F on the schedule.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Subtotal</th>
</tr>
</thead>
</table>

**Notes**

**Subtotal**
Associate of Arts Degree: Social Science Emphasis

Associate of Arts (AA) - 60 credits

D F M W O

The Associate of Arts degree with Emphasis in Social Science provides the necessary lower division coursework for transfer to a four-year major in sociology, social work or human services. Transferability of courses from Minnesota State Community and Technical College (M State) to public higher education systems in Minnesota is enhanced by transfer agreements that are in place. Coursework will transfer in its entirety to the Bachelor of Social Work at Minnesota State University Moorhead and may transfer in part or entirety to other programs and/or post-secondary institutions.

Associate of Arts Degree: Social Science Emphasis - Associate of Arts (AA) (Social Work)

<table>
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<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Crds</th>
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<tbody>
<tr>
<td>ENGL1205</td>
<td>Writing About Literature</td>
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<tr>
<td>ENGL1210</td>
<td>Writing About Current Issues</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1215</td>
<td>Professional and Technical Writing</td>
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</tr>
<tr>
<td>BIO1104</td>
<td>Biology of Human Concerns</td>
<td>3</td>
</tr>
<tr>
<td>COMM1120</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ECON1150</td>
<td>Essentials of Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1101</td>
<td>College Writing</td>
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</tr>
<tr>
<td>POLS1120</td>
<td>American National Government</td>
<td>3</td>
</tr>
<tr>
<td>PSYC2220</td>
<td>Professional Psychology</td>
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</tr>
<tr>
<td>PSYC2220</td>
<td>Lifespan Development</td>
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</tr>
<tr>
<td>SOC1111</td>
<td>Introduction to Sociology</td>
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<tr>
<td>SW2250</td>
<td>Introduction to Social Work/Social Welfare</td>
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3 credits from the following:

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<td>3</td>
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<tr>
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<td>Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>SOC1111</td>
<td>Introduction to Sociology</td>
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Associate of Arts Degree: Social Science Emphasis - Associate of Arts (AA) (Sociology)

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<tbody>
<tr>
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<td>Writing About Current Issues</td>
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<td>Professional and Technical Writing</td>
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<td>Introduction to Public Speaking</td>
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<td>PSYC2220</td>
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</tr>
<tr>
<td>SOC1111</td>
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</tbody>
</table>

Individualized Studies

Associate of Applied Science (AAS) - 60 credits

D F M W O

The Individualized Studies Associate in Applied Science (AAS) degree is designed for students who intend to update their skills and expand employment opportunities with a customized degree field. This 60-credit degree allows learners to develop a specific education plan to update their skills and gives them the opportunity and flexibility to focus on specialized career interests not offered in college's structured degree programs. It integrates a number of subjects into a degree program and builds on a current area of study or expertise. Students work collaboratively with faculty and staff to create a degree plan that meets individualized educational needs. Students who enroll in the Individualized Studies program will complete 45 specialized career technical credits and 15 general education credits (in at least three Minnesota transfer goal areas).

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</table>

Liberal Arts and Sciences

Associate of Arts (AA) - 60 credits

D F M W O

The Associate of Arts is a liberal arts degree that includes the first two years of most bachelor's degrees and is designed for transfer to a four-year university. Students who complete M State’s Associate in Arts degree, which includes the Minnesota Transfer Curriculum, are assured of a smooth transfer into Minnesota State Colleges and Universities system institutions as well as into specific majors at all the campuses of the University of Minnesota.

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<td>BIO1104</td>
<td>Biology of Human Concerns</td>
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</tr>
<tr>
<td>COMM1120</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ECON1150</td>
<td>Essentials of Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1101</td>
<td>College Writing</td>
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3 credits from the following:

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<tr>
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<th>Course Title</th>
<th>Crds</th>
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<tbody>
<tr>
<td>ENGL1205</td>
<td>Writing About Literature</td>
<td>3</td>
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<tr>
<td>ENGL1210</td>
<td>Writing About Current Issues</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1215</td>
<td>Professional and Technical Writing</td>
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<tr>
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<td>COMM1120</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
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<td>3</td>
</tr>
<tr>
<td>ENGL1101</td>
<td>College Writing</td>
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</tbody>
</table>

Psychology Transfer Pathway

Associate of Arts (AA) - 60 credits

M O

The Psychology Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Psychology bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Crds</th>
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<tr>
<td>ENGL1210</td>
<td>Writing About Current Issues</td>
<td>3</td>
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<tr>
<td>ENGL1215</td>
<td>Professional and Technical Writing</td>
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<tr>
<td>MATH114</td>
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<td>3</td>
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<tr>
<td>MATH1123</td>
<td>Introduction to Statistics</td>
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<tr>
<td>ENGL1215</td>
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<td>MATH114</td>
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<tr>
<td>MATH1123</td>
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<td>3</td>
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<tr>
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<tr>
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3 credits from the following:

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<tr>
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<th>Course Title</th>
<th>Crds</th>
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<tbody>
<tr>
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<tr>
<td>PSYC2220</td>
<td>Lifespan Development</td>
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<td>PSYC2224</td>
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<td>PSYC1500</td>
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<td>PSYC2302</td>
<td>Cross-Cultural Psychology</td>
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<tr>
<td>PSYC2950</td>
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<td>PSYC1200</td>
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<tr>
<td>PSYC2900</td>
<td>Statistics for Behavioral and Social Sciences</td>
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</table>
Environmental Science

Associate of Science (AS) - 60 credits

The Associate of Science in Environmental Science is designed to provide students an avenue to a four-year environmental science degree, preparing them for a career in an environmental field. The program emphasizes a broad background in natural sciences and mathematics, ensuring students are properly prepared for further study at an advanced level.

Course # | Course Title | Crds
--- | --- | ---
8 | General Education w/MnTC Goals | 
3 | ENGL1205 Writing About Literature | 
3 | ENGL1210 Writing About Current Issues | 
3 | ENGL1215 Professional and Technical Writing | 
3 | 3 credits from the following: SOC1111 Introduction to Sociology | 
3 | SOC1113 Social Problems | 
3 | BIOL1107 Environmental Science Issues | 
1 | BIOL1108 Environmental Science Issues Lab | 
4 | BIOL112 General Biology I | 
4 | BIOL1122 General Biology II | 
5 | CHEM111 General Inorganic Chemistry I | 
1 | CHEM1112 General Inorganic Chemistry II | 
3 | ENGL1101 College Writing | 
4 | MATH1114 College Algebra | 
4 | MATH1115 Functions/Trigonometry | 
5 | MATH1134 Calculus I | 
4 | PHYS1401 College Physics I | 

Equine Science

Associate of Applied Science (AAS) - 60 credits

This program will build upon the introductory skills gained in the Equine Science diploma program at M State and Red Horse Ranch. Additional academic theory and general education transfer courses will be taken online while the student works at an approved internship site. This degree and internship experience will give the student the finished skills necessary for careers in stable management, breeding, training, judging, riding instruction and related occupations.

Course # | Course Title | Crds
--- | --- | ---
14 | General Education w/MnTC Goals | 
1 | AGR1400 Farm Marketing and Management | 
3 | ENGL1101 College Writing | 
1 | EGS1001 Introduction to Equine Science | 
3 | EGS1050 Equine Anatomy | 
3 | EGS1060 Equine Reproduction and Nutrition | 
2 | EGS1130 Stable Operations I | 
2 | EGS1131 Stable Operations II | 
3 | EGS1140 Western Horsemanship | 
2 | EGS1150 Fundamentals of Riding Instruction | 
3 | EGS1160 English Equitation | 
1 | EGS1170 Introduction to Horse Training | 
2 | EGS1180 Equine Evaluation | 
2 | EGS1190 Farrier Science | 
1 | EGS1200 Equine Events Management | 
3 | EGS2200 Recognition and Management of Equine Disorders | 
3 | EGS2300 Applied Stable Operations | 
6 | EGS2501 Equine Internship | 
3 | SOC2222 Sociology of Agriculture | 

Fundamentals of Culinary Arts

Diploma - 31 credits

This program will provide a blend of transferable college credit courses along with specific academic and hands-on equine courses. This diploma will give students the introductory skills necessary for careers in stable management, horse training, horse judging, riding instruction or other related occupations. In addition, this program can serve as a starting point for a bachelor’s degree program in equine science, a pre-veterinary program or a pre-veterinary technology program. Students in this program may also wish to use it as a foundation for a life-long equine learning experience as a horse owner/ rider. Courses are taught at the M State campus and at Red Horse Ranch Arena, a world-class training/board/ riding/events facility located six miles northeast of Fergus Falls. Students will have the opportunity to learn and practice their skills at a busy, private equine business facility. This gives M State students a unique advantage when entering the job market since they will possess a diploma that reflects a combination of academic learning and real-life application.

Course # | Course Title | Crds
--- | --- | ---
1 | Career | 
3 | EGS1060 Equine Reproduction and Nutrition | 
1 | EGS1130 Stable Operations I | 
3 | SOC2222 Sociology of Agriculture | 
1 | EGS1141 Stable Operations II | 
2 | AGR1400 Farm Marketing and Management | 
2 | EGS1190 Farrier Science | 
1 | EGS1200 Equine Events Management | 
1 | EGS1150 Fundamentals of Riding Instruction | 
3 | EGS1160 English Equitation | 
3 | EGS1170 Introduction to Horse Training | 
3 | Western Horsemanship | 
2 | EGS1180 Equine Evaluation | 
2 | EGS1190 Farrier Science | 
1 | EGS1200 Equine Events Management | 
3 | EGS2200 Recognition and Management of Equine Disorders | 
3 | EGS2300 Applied Stable Operations | 
6 | EGS2501 Equine Internship | 
3 | SOC2222 Sociology of Agriculture | 

Minnesota State Community and Technical College
Course Catalog 2017-2018

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+ Not offered academic year 2017-2018
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Cisco Networking Certificate ............................64
Computer Programming AAS ............................64
Graphic Design Technology AAS ........................64
Graphic Design Technology Certificate ...............64
Information Technology AAS .............................65
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Network Administration and Security AAS ..........66
Network Security Certificate ...............................66
Sign Language Interpreter Preparation AAS ..........67
Theatre Arts AFA ..............................................67
Theatre Transfer Pathway ..................................67
Visual Arts AFA ..............................................68
Web Development Certificate .............................68
American Sign Language Studies

Certificate - 17 credits
M

The American Sign Language (ASL) Studies certificate provides students with a basic knowledge of American Sign Language and Deaf Culture. The curriculum provides a foundation for entry into a career in a deafness-related field and prepares students for continued educational studies in more advanced preparation for ASL interpreter certification. This program does not prepare students to become interpreters.

<table>
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<td>ASL112</td>
<td>American Sign Language and Deaf Life</td>
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<td>ASL113</td>
<td>ASL &amp; Deaf Culture I</td>
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<td>ASL114</td>
<td>ASL &amp; Deaf Culture IV</td>
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<tr>
<td>COMM2230</td>
<td>Interpersonal Communication</td>
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</table>

Cisco Networking

Certificate - 12 credits
O

This 12-credit certificate will prepare students to take the Cisco Certified Network Associate (CCNA) certification and also the CompTIA Network+ certification. The coursework includes Cisco semesters 1-4. Skill development covers LAN/WAN networking technology and concepts, networking math, networking media, router configuration, switching, VLANs, routing protocols and WAN links and services. The instructor will evaluate computer skills necessary to enter this certificate program. Students should have good reading and study skills, basic computer literacy and awareness of the Internet. Prior experience with computer hardware, binary math and basic electronics is desired but not required. Background in cabling is beneficial. Upon completion of this certificate the student will be able to take the CCNA and CompTIA Network+ certification exams offered through VUE or Prometric testing centers.

<table>
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<td>CPTR1118</td>
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<td>CPTR2200</td>
<td>CISCO III</td>
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<tr>
<td>CPTR2208</td>
<td>CISCO IV</td>
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</table>

Computer Programming

Associate of Applied Science (AAS) - 60 credits
M O

This program provides the programming skills needed in computer application development, database management, computer systems and data communications. Students learn to design, write, code, document and implement computer programs for various computer platforms. They learn at least one operating system, one command-level language, one database management system and other high-level programming languages. The program prepares students to design and develop computer software systems as well as design information management systems. It includes the study of languages, software design, information flow and processing. Students study the design of mathematical and simulation models and large-scale programs used for processing and retrieving information.

<table>
<thead>
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<th>Course #</th>
<th>Course Title</th>
<th>Crds</th>
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<tr>
<td>CPTR1106</td>
<td>Microcomputer Databases</td>
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<tr>
<td>CPTR1109</td>
<td>Visual Basic Program I</td>
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<td>CPTR1115</td>
<td>COBOL Programming</td>
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<tr>
<td>CPTR1129</td>
<td>RPG Programming</td>
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<tr>
<td>CPTR1170</td>
<td>Web Engineering I</td>
<td>3</td>
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<tr>
<td>CPTR2000</td>
<td>Mobile Application Development</td>
<td>3</td>
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<tr>
<td>CPTR2230</td>
<td>Structured Query Language</td>
<td>3</td>
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<tr>
<td>CPTR2238</td>
<td>Database Integration</td>
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<td>CPTR2242</td>
<td>Java Programming</td>
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<td>ENGL1101</td>
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</tbody>
</table>

Graphic Design Technology

Associate of Applied Science (AAS) - 60 credits
M

Graphic design technology is a highly competitive and rewarding career field for those with a talent and/or interest in the graphic arts. Graphic design technology focuses on the integration of digital technology and graphic design to create communication materials for Web, multimedia and print production. Within two years of training, individuals develop creatively and technically as they learn skills in photography, color theory, typography, layout and design, and Web and print production. Students become task-oriented. Students, in addition to meeting deadlines, solve problems and work efficiently. Students will have opportunities to interact with and receive feedback from industry professionals outside the program. Students also are trained in the area of self-promotion, job-search and interviewing skills, along with compiling a personal portfolio of their work. Graphic Design Technology graduates are expected to be self-motivated, organized and able to apply the skills they learn in the classroom outside of instruction time to strengthen their abilities. The Graphic Design Technology program prepares students for a vast array of entry-level positions across the graphic design industry.

<table>
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<td>GDTCC235</td>
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<td>COMM1120</td>
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<td>College Writing</td>
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<td>GDTCC200</td>
<td>Macintosh Production Processes</td>
<td>3</td>
</tr>
<tr>
<td>GDTCC113</td>
<td>Design and Layout I</td>
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<td>GDTCC115</td>
<td>Design and Layout II</td>
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<tr>
<td>GDTCC126</td>
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<td>GDTCC144</td>
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<td>GDTCC150</td>
<td>Process Printing Theory</td>
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<td>GDTCC203</td>
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<td>GDTCC244</td>
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<td>GDTCC258</td>
<td>Graphic Design Professional Practices</td>
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<tr>
<td>GDTCC278</td>
<td>Digital Preflight</td>
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</table>

Graphic Design Technology

Certificate - 30 credits
M

Graphic Design Technology is a highly competitive and rewarding career for those with a talent and/or interest in the graphic arts. Graphic Design Technology does not focus on the fine arts of painting and art history, but on the integration of technology with graphic design to train students to create communication materials (stationery, brochures, annual reports, newspaper layout, etc.) for print production. Students are required to purchase an Apple Macintosh laptop and all necessary graphic software, along with necessary peripherals. The 30-credit Certificate is targeted specifically at advanced students, students possessing an advanced degree or students who have professional experience in a creative field. It is a two-semester “fast track” curriculum, with the intent of building on students' existing skill set and experience or accommodating the advanced students' accelerated goals for placement by using stackable credentialing of various GDTCC coursework to a total of 30 credits. The Graphic Design Technology program prepares students for entry-level positions in the graphic design technology industry. Students work on their own Macintosh laptops to complete coursework, so there is never a need to wait for an available computer. Owning individual laptops also allows each student to be mobile and work from anywhere at any time. Students begin with foundation-level work that includes learning about Ma-
Information Technology

Associate of Applied Science (AAS) - 60 credits

This program prepares students to work in information technology. Students learn to select appropriate systems, create necessary solutions, apply existing systems, integrate a variety of systems and administer systems. This career program prepares students to fulfill a variety of roles within the information technology field.

<table>
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<tr>
<td>GDTC2258</td>
<td>Graphic Design Professional Practices</td>
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</table>

Information Technology - Database Administration

Associate of Applied Science (AAS) - 60 credits

M O

This program prepares students for careers in support, maintenance, and administration of database management systems in a wide variety of market segments. Students will learn how to implement security measures while performing database administration tasks, generate database-driven reports to support business intelligence, apply ethical and security practices in handling data, establish interconnectivity of databases and web services, use testing and debugging methods, devise backup and recovery measures in a database environment and learn the software development life cycle. This program teaches students the skills and knowledge for occupations such as database administrator, database analyst, data analyst or database support specialist.

<table>
<thead>
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<th>Course Title</th>
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<td>Microcomputer Databases</td>
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<tr>
<td>CPTR1108</td>
<td>CISCO I</td>
<td>3</td>
</tr>
<tr>
<td>CPTR1122</td>
<td>Microcomputer Maintenance</td>
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</tr>
<tr>
<td>CPTR2224</td>
<td>Linux I</td>
<td>3</td>
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<tr>
<td>CPTR2234</td>
<td>Structured Query Language</td>
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<td>CPTR2240</td>
<td>Database Administration</td>
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<td>CPTR2245</td>
<td>Enterprise Network Technologies</td>
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<td>CPTR2260</td>
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<td>Network Operating Systems</td>
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<td>ITSS1100</td>
<td>Information Technology Help Desk</td>
<td>3</td>
</tr>
<tr>
<td>ITSS2100</td>
<td>Supporting End-User Applications</td>
<td>3</td>
</tr>
<tr>
<td>SOC1111</td>
<td>Introduction to Sociology</td>
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</tr>
</tbody>
</table>

Music

Associate of Fine Arts (AFA) - 68 credits

M

The Associate in Fine Arts in Music is designed to provide a means for music students to pursue a path with seamless transition to a four-year music degree and to be best prepared for a degree and/or career in music. The AFA emphasizes a fine arts focus within a discipline area of study and offers students preparation for fine arts study at the university level. The AFA in Music at M State allows for a choral or instrumental emphasis and ensures that students will have the necessary coursework to prepare for advanced studies in music.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MUSC1151</td>
<td>Individual Voice Lessons</td>
<td>1</td>
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<tr>
<td>MUSC1181</td>
<td>Private Instrumental Lessons</td>
<td>1</td>
</tr>
<tr>
<td>MUSC1188</td>
<td>Private Music Composition Lessons</td>
<td>1</td>
</tr>
<tr>
<td>MUSC1191</td>
<td>Individual Piano Lessons</td>
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<tr>
<td>MUSC1135</td>
<td>Voice Ensemble</td>
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</table>

minnesota.edu
Network Administration and Security

Associate of Applied Science (AAS) - 60 credits

This program provides the skills to support and maintain information technology (IT) systems including overall computer knowledge, networking skills, application software and IT security. Students will learn networking concepts that include switching, routing, server operating systems, directory services and security. Students will learn to perform security risk assessments, implement security measures and perform penetration testing. Additional program topics include computer hardware and operating systems as well as software selection, customization and support. Many classes are built around specific industry certification.

Network Security

Certificate - 18 credits

This certificate is designed for those who have industry experience or are currently nearing completion of an Information Technology field degree. Students will learn general skills related to network security and then expand those skills to more focused areas. Throughout the course work, students review and apply network security practices using multiple operating systems. Areas of focus include penetration testing, perimeter defense and Web security. The certificate will prepare students for the CompTIA Security+ certification and prepare for a job in network security.

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Crds</th>
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</thead>
<tbody>
<tr>
<td>CSSEC214</td>
<td>Topics in Network Security</td>
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</tr>
<tr>
<td>CSSEC212</td>
<td>Web Security</td>
<td>3</td>
</tr>
<tr>
<td>CSSEC228</td>
<td>Network Defense</td>
<td>3</td>
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<tr>
<td>CSSEC210</td>
<td>Security Breaches and Countermeasures</td>
<td>3</td>
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<td>CPTR2236</td>
<td>Network Security</td>
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<tr>
<td>CPTR2234</td>
<td>Linux I</td>
<td>3</td>
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</tbody>
</table>

Course Catalog 2017-2018

Minneapolis State Community and Technical College

877.450.3322
Sign Language Interpreter Preparation

**Certificate - 18 credits**

The Sign Language Interpreter - Medical program provides specialized training for sign language interpreters interested in pursuing the field of medical interpreting. Students will be introduced to medical terminology, human body systems, medical interpreting and ethical decision making. Students will expand their existing interpreting skills and prepare to facilitate communication between patients who use American Sign Language (ASL) and their medical care providers.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ASLM1110</td>
<td>Introduction to Medical Interpreting</td>
<td>3</td>
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<tr>
<td>ASLM1111</td>
<td>Medical Signs</td>
<td>2</td>
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<tr>
<td>ASLM1112</td>
<td>Special Topics in the Field of Medical Interpreting</td>
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<tr>
<td>ASLM1113</td>
<td>Introduction to Mental Health Interpreting</td>
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<tr>
<td>HLTH1110</td>
<td>Anatomy and Physiology</td>
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<tr>
<td>HLTH1116</td>
<td>Medical Terminology</td>
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</table>

Theatre Arts

**Associate of Fine Arts (AFA) - 60 credits**

The 60-credit Associate in Fine Arts (AFA) degree in Theatre Arts provides students with the skills to help them develop into professional artists. Students will explore multiple areas of technical theatre including set building, design, lighting and sound, and makeup. In addition, students will experience performance and production. The degree ensures that students will have the necessary coursework to prepare for transfer and advanced studies in theatre.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
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<td>College Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1101</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1140</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1145</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1125</td>
<td>Theatre Technical Practicum</td>
<td>2</td>
</tr>
<tr>
<td>ENGL1130</td>
<td>Stage Make-up</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1140</td>
<td>Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1205</td>
<td>Writing About Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1210</td>
<td>Writing About Current Issues</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1215</td>
<td>Professional and Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>THTR1100</td>
<td>Design for the Stage</td>
<td>3</td>
</tr>
<tr>
<td>THTR1101</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THTR1105</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THTR1120</td>
<td>Script Analysis</td>
<td>3</td>
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<tr>
<td>THTR1125</td>
<td>Theatre Technical Practicum</td>
<td>2</td>
</tr>
<tr>
<td>THTR1130</td>
<td>Stage Make-up</td>
<td>3</td>
</tr>
<tr>
<td>THTR1140</td>
<td>Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THTR2120</td>
<td>Script Analysis</td>
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<tr>
<td>THTR2130</td>
<td>Design for the Stage</td>
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</table>

Theatre Transfer Pathway

**Associate of Fine Arts (AFA) - 60 credits**

The 60-credit Associate in Fine Arts (AFA) degree in Theatre provides students with the skills to help them develop into professional artists. Students will explore multiple areas of technical theatre including set building, design, lighting and sound, and makeup. In addition, students will experience performance and production. The degree ensures that students will have the necessary coursework to prepare for transfer and advanced studies in theatre. The Theatre Transfer Pathway AFA offers students a powerful option: the opportunity to complete an AFA degree with course credits that directly transfer to designated Theatre bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

<table>
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<tr>
<th>Course #</th>
<th>Course Title</th>
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<tbody>
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<td>ENGL1101</td>
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<td>ENGL1205</td>
<td>Writing About Literature</td>
<td>3</td>
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<td>ENGL1210</td>
<td>Writing About Current Issues</td>
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<tr>
<td>ENGL1215</td>
<td>Professional and Technical Writing</td>
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<tr>
<td>THTR1100</td>
<td>Design for the Stage</td>
<td>3</td>
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<tr>
<td>THTR1101</td>
<td>Introduction to Theatre</td>
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<tr>
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<td>Acting I</td>
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<tr>
<td>THTR1120</td>
<td>Script Analysis</td>
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<tr>
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<td>Theatre Technical Practicum</td>
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<td>THTR1130</td>
<td>Stage Make-up</td>
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<td>THTR1220</td>
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</tr>
<tr>
<td>THTR2130</td>
<td>Design for the Stage</td>
<td>3</td>
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</table>
Visual Art

Associate of Fine Arts (AFA) - 60 credits

The 60-credit AFA in Art provides students with the skills to help them develop into professional artists. Students will explore multiple areas in the visual arts including design, painting, drawing, ceramics, mixed media, printmaking and photography. In addition, students will explore artistic intent and exhibition opportunities. The degree ensures that students will have the necessary coursework to prepare for transfer and advanced studies in the visual arts.

<table>
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<td>Painting I</td>
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<tr>
<td>ART1117</td>
<td>Printmaking I</td>
<td>3</td>
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<tr>
<td>ART2111</td>
<td>Drawing II</td>
<td>3</td>
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<tr>
<td>ART2112</td>
<td>Painting II</td>
<td>3</td>
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<tr>
<td>ART2114</td>
<td>Photographic Art I</td>
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<tr>
<td>ART2116</td>
<td>Mixed Media I</td>
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<tr>
<td>ART2241</td>
<td>Advanced Ceramics</td>
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<tr>
<td>ART1107</td>
<td>Foundations of Art, 2-D</td>
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<tr>
<td>ART1108</td>
<td>Foundations of Art, 3-D</td>
<td>3</td>
</tr>
<tr>
<td>ART111</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART112</td>
<td>World of Art I</td>
<td>3</td>
</tr>
<tr>
<td>ART1122</td>
<td>World of Art II</td>
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<td>ART2360</td>
<td>Art, Portfolio Design and Professional Development</td>
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<td>ART2999</td>
<td>AFA-Visual Art Capstone Exhibition</td>
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<td>ENGL1101</td>
<td>College Writing</td>
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<tr>
<td>HIST2213</td>
<td>American History: 20th Century</td>
<td>3</td>
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<tr>
<td>PHIL201</td>
<td>Ethics</td>
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</tbody>
</table>

9 credits from the following:

- Visual Art Foundations, 2-D
- Visual Art Foundations, 3-D
- Drawing I
- World of Art I
- World of Art II
- Art, Portfolio Design and Professional Development
- AFA-Visual Art Capstone Exhibition
- College Writing
- American History: 20th Century
- Ethics

Web Design

Certificate - 30 credits

The Web Design Certificate provides students with the opportunity to use creative and technical skills to create customer-friendly websites using the most sophisticated tools currently available. Students will gain a strong understanding, appreciation and practical knowledge of the processes involved in building successful, visually appealing websites.

<table>
<thead>
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<th>Course Title</th>
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<tr>
<td>WEBD1010</td>
<td>HTML</td>
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<tr>
<td>WEBD1020</td>
<td>Photoshop</td>
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<tr>
<td>WEBD1030</td>
<td>Multimedia</td>
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<tr>
<td>WEBD1110</td>
<td>Cascading Style Sheets</td>
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<tr>
<td>WEBD1130</td>
<td>Electronic Commerce</td>
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<tr>
<td>WEBD1140</td>
<td>JavaScript</td>
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<tr>
<td>WEBD2010</td>
<td>Content Management Systems</td>
<td>3</td>
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<tr>
<td>WEBD2020</td>
<td>User Interface Design</td>
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</tr>
<tr>
<td>WEBD2030</td>
<td>Search Engine Optimization</td>
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</tbody>
</table>
Business, Administration and Management

+ Not offered academic year 2017-2018

Learn more at minnesota.edu

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Human Resources AS .............................................77
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Professional Sales Skills Certificate .............................78
Supervisory Leadership Essentials1 ..............................78
Accounting

Associate of Applied Science (AAS) - 69 credits

D M O

This major provides the knowledge and skills necessary to examine, analyze, interpret and correct accounting data for the purpose of preparing financial statements, budgets, forecast accounting reports, payroll reports and individual state and federal income tax returns. Computerized accounting concepts are included in this area of study.

Fall Start

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL1101</td>
<td>Introduction to Sociology</td>
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<td>Business Math and Calculators</td>
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<td>BUS1146</td>
<td>Personal Finance</td>
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<th>Course Title</th>
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<td>ACCT22630</td>
<td>Fund/Nonprofit Accounting</td>
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<td>ACCT2640</td>
<td>Accounting Internship</td>
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<td>ACCT2800</td>
<td>Accreditation Council for Accountancy and Taxation Exam Review</td>
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<td>ACCT212</td>
<td>Financial Accounting II</td>
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<tr>
<td>ACCT213</td>
<td>Managerial Accounting</td>
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<td>ACCT215</td>
<td>Computerized Accounting Application</td>
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<td>ACCT255</td>
<td>Income Tax-Individual</td>
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<tr>
<td>BUS2100</td>
<td>Spreadsheet and Database Concepts</td>
<td>3</td>
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<td>BUS2150</td>
<td>Legal Environment of Business</td>
<td>3</td>
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<tr>
<td>BUS2162</td>
<td>Business Management</td>
<td>3</td>
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<tr>
<td>BUS2163</td>
<td>Principles of Management</td>
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<td>BUS2206</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
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<td>BUS2210</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
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<tr>
<td>ECON2100</td>
<td>Macroeconomics</td>
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<td>Microeconomics</td>
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<tr>
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<tr>
<td>MATH1114</td>
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Spring Start

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<tr>
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<td>Macroeconomics</td>
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<tr>
<td>ECON2220</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT1101</td>
<td>Payroll</td>
<td>3</td>
</tr>
<tr>
<td>ACCT1108</td>
<td>Business Math and Calculators</td>
<td>3</td>
</tr>
<tr>
<td>ACCT1120</td>
<td>Business Law</td>
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<tr>
<td>ACCT1124</td>
<td>Spreadsheet Applications</td>
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<tr>
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<tr>
<td>ACCT2202</td>
<td>Financial Accounting II Lab</td>
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<td>ACCT2203</td>
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</tr>
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<td>ACCT2211</td>
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<tr>
<td>ACCT2212</td>
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<td>ACCT2216</td>
<td>Quickbooks</td>
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<td>ACCT2217</td>
<td>Microsoft Dynamics GP</td>
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<tr>
<td>ACCT2255</td>
<td>Income Tax-Individual</td>
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<tr>
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<td>Introduction to Computer Technology</td>
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<td>College Writing</td>
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</tr>
<tr>
<td>PDEV1102</td>
<td>Contemporary Career Search</td>
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</table>

Accounting

Associate of Science (AS) - 60 credits

D M O

The AS in Accounting is a two-year degree designed for both the student who wants to enter the workforce upon graduation and the student who plans to transfer to a four-year college or university. The program offers a balance of general education courses and courses specific to preparing the student for a career in accounting.

Fall Start

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Cds</th>
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<tbody>
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</tr>
<tr>
<td>ACCT22630</td>
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<tr>
<td>ACCT2640</td>
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<tr>
<td>ACCT2800</td>
<td>Accreditation Council for Accountancy and Taxation Exam Review</td>
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3 credits from the following:

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<td>ACCT213</td>
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<td>ACCT215</td>
<td>Computerized Accounting Application</td>
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<td>ACCT255</td>
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</tr>
<tr>
<td>BUS2100</td>
<td>Spreadsheet and Database Concepts</td>
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<tr>
<td>BUS2150</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
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<td>Ethics</td>
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</table>

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Minnesota State Community and Technical College
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Accounting Clerk

Diploma - 33 credits
D M O

This program provides the knowledge and skills necessary to perform routine calculating, journalizing, posting and verifying duties to maintain accounting records and to prepare payroll reports and individual and federal tax returns. Both manual and computerized accounting concepts and applications are included.

Spring Start

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<td>ACCT2640</td>
<td>Accounting Internship</td>
<td>1-4</td>
</tr>
<tr>
<td>ACCT2800</td>
<td>Accreditation Council for Accountancy and Taxation Exam Review</td>
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3 credits from the following:

ACCT2256 Income Tax-Business ................................................. 3
ACCT2630 Fund/Nonprofit Accounting .................................. 3
ACCT2640 Accounting Internship ........................................ 1-4
ACCT2800 Accreditation Council for Accountancy and Taxation Exam Review .................. 3

3 credits from the following:

ACCT1101 Payroll ............................................................... 3
ACCT1108 Business Math and Calculators ......................... 3
ACCT1124 Spreadsheet Applications ..................................... 3
ACCT2201 Financial Accounting II Lab .............................. 1
ACCT2203 Managerial Accounting Lab .............................. 1
ACCT2211 Financial Accounting I ....................................... 3
ACCT2212 Financial Accounting II ...................................... 3
ACCT2213 Managerial Accounting ......................................... 3
ACCT2216 Quickbooks ....................................................... 3
ACCT2217 Microsoft Dynamics GP ..................................... 3
ACCT2255 Income Tax-Individual ........................................ 3
ACCT2620 Intermediate Accounting II ................................. 4
ACCT2622 Intermediate Accounting II ................................ 3
CPT1104 Introduction to Computer Technology .................. 3
PDEV1102 Contemporary Career Search .............................. 1

Fall Start

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<td>Spreadsheet Applications</td>
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<td>ACCT2216</td>
<td>Quickbooks</td>
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<td>ACCT2255</td>
<td>Income Tax-Individual</td>
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<tr>
<td>CPT1104</td>
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</tr>
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<td>PDEV1102</td>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACCT1101</td>
<td>Payroll</td>
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<tr>
<td>ACCT1108</td>
<td>Business Math and Calculators</td>
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<td>Spreadsheet Applications</td>
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<td>ACCT2212</td>
<td>Financial Accounting II</td>
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Spring Start

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<tr>
<td>ACCT1101</td>
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<tr>
<td>ACCT1108</td>
<td>Business Math and Calculators</td>
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</tr>
<tr>
<td>ACCT1124</td>
<td>Spreadsheet Applications</td>
<td>3</td>
</tr>
<tr>
<td>ACCT2201</td>
<td>Financial Accounting I Lab</td>
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<tr>
<td>ACCT2202</td>
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</table>

Administrative Support

Diploma - 33 credits
M

The Administrative Support diploma program prepares students to provide a wide range of office skills for a variety of entry-level positions in the business office setting. Students develop skills in communications, software applications, office procedures, bookkeeping, filing and document processing to complete the day-to-day activities required in the workplace and to create a positive office environment.

<table>
<thead>
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<th>Course Title</th>
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<tr>
<td>ADM1100</td>
<td>Keyboarding I</td>
<td>3</td>
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<tr>
<td>ADM1110</td>
<td>Word Processing</td>
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<tr>
<td>ADM1116</td>
<td>Business Communications I</td>
<td>3</td>
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<tr>
<td>ADM1120</td>
<td>Administrative Office Procedures</td>
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<td>ADM1128</td>
<td>Records Management</td>
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<td>ADM1130</td>
<td>Office Software Applications</td>
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<td>ADM1140</td>
<td>Administrative Office Professional Internship I</td>
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<tr>
<td>ADM1190</td>
<td>Keyboarding II</td>
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<td>ADM1310</td>
<td>Critical Workplace Skills</td>
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<tr>
<td>ADM2216</td>
<td>Business Communications II</td>
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Administrative Support

Diploma - 44 credits
M

The Administrative Support diploma program prepares students for the workforce by focusing on the administrative and technical skills needed to meet the demands of the current and emerging office environment. The program provides both the theory and practice needed in order for students to succeed in an office environment. After successful completion of the program, students will be knowledgeable in business office software, administrative procedures, communication, teamwork and problem solving.

ADMS Diploma Track

<table>
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<tr>
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<th>Course Title</th>
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<tbody>
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<td>Office Software Applications</td>
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3 credits from the following:

ADMS2212 Advanced Office Software Applications | 3
BUS1300 Financial Statement Analysis | 3
FINC1110 Introduction to Financial Services | 3
FINC1119 Personal Finance Products/Customer Service | 3
FINC2221 Real Estate Lending | 3
HRES1122 Human Resource Management | 3
HRES1126 Employee Processes | 3
HRES1134 Training and Development | 3
HRES2204 Policy Administration | 3
HRES2224 Employee/Labor Relations | 3
PARA1101 Introduction to Paralegal | 3
PARA1102 Legal Research and Writing I | 3
PARA1105 Criminal Law for Paralegals | 3

3 credits from the following:

COMM1100 Power and Communications in Human Relations | 3
COMM1140 Interpersonal Communication | 3
ENGL1215 Professional and Technical Writing | 3

3 credits from the following:

ADMS2214 Emerging Office Technologies | 3
BUS1300 Financial Statement Analysis | 3
FINC1110 Introduction to Financial Services | 3
FINC1119 Personal Finance Products/Customer Service | 3
FINC2221 Real Estate Lending | 3
HRES1122 Human Resource Management | 3
HRES1126 Employee Processes | 3
HRES1134 Training and Development | 3
HRES2204 Policy Administration | 3
HRES2224 Employee/Labor Relations | 3
PARA1101 Introduction to Paralegal | 3
PARA1102 Legal Research and Writing I | 3
PARA1105 Criminal Law for Paralegals | 3

3 credits from the following:

ADMS2216 Business Communications II | 3
BUS1300 Financial Statement Analysis | 3
FINC1110 Introduction to Financial Services | 3
**Course #** | **Course Title** | Crds  
--- | --- | ---  
FNC1119 | Personal Finance Products/Customer Service | 3  
FNC2221 | Real Estate Lending | 3  
HRES1122 | Human Resource Management | 3  
HRES1126 | Employee Processes | 3  
HRES1134 | Training and Development | 3  
HRES2204 | Policy Administration | 3  
HRES2224 | Employee/Labor Relations | 3  
PARA1101 | Introduction to Paralegal | 3  
PARA1102 | Legal Research and Writing | 1  
PARA1105 | Criminal Law for Paralegals | 3  
ACCT1012 | Principles of Bookkeeping | 3  
ADMS1100 | Keyboarding I | 3  
ADMS1110 | Word Processing | 3  
ADMS1112 | Desktop Publishing | 3  
ADMS1116 | Business Communications I | 3  
ADMS1120 | Administrative Office Procedures | 3  
ADMS1128 | Records Management | 3  
ADMS1190 | Keyboarding II | 1  
ADMS2205 | Advanced Word Processing | 3  
ADMS2240 | Administrative Office Professional Internship II | 3  

**FNCS Track**

Course # | Course Title | Crds  
--- | --- | ---  
ADMS1116 | Administrative Office Assistant - Finance | 3  
ADMS1128 | Records Management | 3  
9 credits from the following:  
FNC1110 | Introduction to Financial Services | 3  
FNC1119 | Personal Finance Products/Customer Service | 3  
ADMS2221 | Real Estate Lending | 3  
ADMS1110 | Word Processing | 3  
ADMS1116 | Business Communications I | 3  

**HRES Track**

Course # | Course Title | Crds  
--- | --- | ---  
ADMS1116 | Administrative Office Assistant - Human Resources | 3  
ADMS1128 | Records Management | 3  
9 credits from the following:  
HRES1122 | Human Resource Management | 3  
HRES1126 | Employee Processes | 3  
HRES1134 | Training and Development | 3  
HRES2204 | Policy Administration | 3  
HRES2224 | Employee/Labor Relations | 3  
ADMS1110 | Word Processing | 3  
ADMS1116 | Business Communications I | 3  

**PARA Track**

Course # | Course Title | Crds  
--- | --- | ---  
ADMS1116 | Administrative Office Assistant - Legal | 3  
ADMS1128 | Records Management | 3  
9 credits from the following:  
PARA1101 | Introduction to Paralegal | 3  
PARA1102 | Legal Research and Writing | 3  
PARA1105 | Criminal Law for Paralegals | 3  

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**Administrative Office Assistant - Finance**

Certificate - 18 credits

M O

This program covers the fundamental basics of office assisting and offers an introduction to finance, providing students with the skills needed to obtain entry-level office assisting and finance-related positions with a basic understanding of the professional skills and language/vocabulary needed to perform duties in this role. This certificate may be stacked with other courses and certificates to obtain a diploma or an AAS degree.

**Course #** | **Course Title** | Crds  
--- | --- | ---  
ADMS1120 | Administrative Office Procedures | 3  
ADMS1128 | Records Management | 3  
9 credits from the following:  
FNC1110 | Introduction to Financial Services | 3  
FNC1119 | Personal Finance Products/Customer Service | 3  
ADMS2221 | Real Estate Lending | 3  
ADMS1110 | Word Processing | 3  
ADMS1116 | Business Communications I | 3  

**Administrative Office Assistant - Human Resources**

Certificate - 18 credits

M O

This program is designed to provide the basics of human resource functions and services to individuals who are interested in working in entry-level administrative support positions with a basic understanding of the professional skills and language/vocabulary required to perform duties in this role. This certificate may be stacked with other courses and certificates to obtain a diploma or an AAS degree.

**Course #** | **Course Title** | Crds  
--- | --- | ---  
ADMS1120 | Administrative Office Procedures | 3  
ADMS1130 | Office Software Applications | 3  
9 credits from the following:  
HRES1122 | Human Resource Management | 3  
HRES1126 | Employee Processes | 3  
HRES1134 | Training and Development | 3  
HRES2204 | Policy Administration | 3  
HRES2224 | Employee/Labor Relations | 3  
ADMS1110 | Word Processing | 3  
ADMS1116 | Business Communications I | 3  

**Administrative Office Assistant - Legal**

Certificate - 18 credits

M O

This program prepares students for entry-level administrative duties in law offices and other legal settings by providing a basic understanding of the terminology and professional skills required in the field through specialized coursework unique to the legal profession.

**Course #** | **Course Title** | Crds  
--- | --- | ---  
ADMS1120 | Administrative Office Procedures | 3  
ADMS1130 | Office Software Applications | 3  
9 credits from the following:  
PARA1101 | Introduction to Paralegal | 3  
PARA1102 | Legal Research and Writing | 3  
PARA1105 | Criminal Law for Paralegals | 3  

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Minnesota State Community and Technical College
Course Catalog 2017-2018
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Business

**Associate of Science (AS) - 60 credits**

**F M O**

This is a flexible degree designed for students who want to continue their education or enter the workforce in a business-related career. The degree is 60 credits in length, including 30 semester credits in general education from six of the 10 goal areas of the Minnesota Transfer Curriculum and 30 technical credits. Students completing this degree may further advance their education by obtaining a degree through articulation agreements with baccalaureate degree-granting institutions. Emphasis is on contemporary business practices through coursework in management, marketing, economics, accounting, technology and communications.

<table>
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<td>Writing About Current Issues</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Professional and Technical Writing</td>
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3 credits from the following:

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<th>Course</th>
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<td>Introduction to Sociology</td>
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<tr>
<td>Course</td>
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<td>3</td>
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<td>Course</td>
<td>Financial Accounting II</td>
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<td>Course</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Spreadsheet and Database Concepts</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Global Business</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>College Writing</td>
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<tr>
<td>Course</td>
<td>College Algebra</td>
<td>4</td>
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<tr>
<td>Course</td>
<td>Applied Calculus and Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Introduction to Statistics</td>
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</table>

Business Transfer Pathways

**Associate of Science (AS) - 60 credits**

**F M O**

The Business Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Business bachelor’s degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor’s degree programs in a related field. This is a flexible degree designed for students who want to continue their education or enter the workforce in a business-related career. The degree is 60 credits in length, including 30 semester credits in general education from six of the 10 goal areas of the Minnesota Transfer Curriculum and 30 technical credits. Emphasis is on contemporary business practices through coursework in management, marketing, economics, accounting, technology and communications.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Crs</th>
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<tbody>
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3 credits from the following:

<table>
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<tbody>
<tr>
<td>Course</td>
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3 credits from the following:

<table>
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<td>Course</td>
<td>Introduction to Sociology</td>
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</tr>
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<td>Course</td>
<td>Financial Accounting I</td>
<td>3</td>
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<tr>
<td>Course</td>
<td>Financial Accounting II</td>
<td>3</td>
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<tr>
<td>Course</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Spreadsheet and Database Concepts</td>
<td>3</td>
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<tr>
<td>Course</td>
<td>Introduction to Public Speaking</td>
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<tr>
<td>Course</td>
<td>Macroeconomics</td>
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<td>Course</td>
<td>Microeconomics</td>
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<tr>
<td>Course</td>
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<tr>
<td>Course</td>
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<td>Course</td>
<td>Introduction to Statistics</td>
<td>4</td>
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<tr>
<td>Course</td>
<td>Business Computers</td>
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</table>

Business Administration

**Associate of Applied Science (AAS) - 60 credits**

**F**

The AAS in Business Administration is a two-year degree designed to prepare students for a career in business at an entry level of management. The degree is designed for the student who wishes to enter the workforce upon graduation. The program offers some general education courses but is concentrated on courses specific to preparing the student for a career in business management.

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Crs</th>
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<tr>
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<tr>
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<tr>
<td>Course</td>
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<td>Course</td>
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<tr>
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<td>Course</td>
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</table>

Certificate - 30 credits

This one-year certificate in Business Administration is designed for the student who wants to prepare for an introductory-level position in the business world. This will give students the opportunity to explore the field of business through select courses.

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<tr>
<td>Course</td>
<td>Computer Utilization in Business &amp; Society</td>
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</tbody>
</table>

Business and Banking

**Associate of Applied Science (AAS) - 60 credits**

**F**

This program is an entry-level degree in banking designed to familiarize the student with the banking industry and how banks function as businesses and to prepare the student for potential employment in banking and finance.

<table>
<thead>
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<th>Course #</th>
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<th>Crs</th>
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<tbody>
<tr>
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3 credits from the following:

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<td>Financial Accounting II</td>
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<tr>
<td>Course</td>
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minnesota.edu

Minnesota State Community and Technical College
Course Catalog 2017-2018
### Business: Management, Marketing and Sales

**Associate of Applied Science (AAS) - 66 credits**

**D M O**

The Business: Management, Marketing and Sales AAS major includes business and general education courses. This major is designed to provide students with the skills necessary for success in a variety of careers in the sales, marketing and management fields. Curriculum includes instruction in areas such as sales, marketing, research, customer service and small business planning. Emphasis is on developing skills in management decision making, communication, problem solving and technology.

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<td>ENTR1400</td>
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<td>MKTG1110</td>
<td>Customer Service</td>
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</table>

### Business: Marketing and Sales

**Diploma - 33 credits**

**D M O**

This program prepares students to enter sales and marketing careers. Positions are available in marketing, merchandising, selling, retailing and service businesses. This major includes courses in computer technology, selling strategies, customer service, telemarketing, and retailing and marketing concepts.

<table>
<thead>
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<th>Course Title</th>
<th>Crds</th>
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<tbody>
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<td>Computer Marketing Applications</td>
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<td>Principles of Marketing</td>
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<td>MKTG1110</td>
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<td>Advertising and Promotion</td>
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**Program Profiles**

- **ENTR2220**
- **MKTG1110**
- **ENTR1400**
- **CPTR1104**
- **BUS2275**
- **COMM1140**
- **ECN2210**
- **ECN2222**
- **ENGL1101**
- **PHIL1201**
- **PSYC1200**

**Business Entrepreneurship**

**Associate of Applied Science (AAS) - 60 credits**

**D O**

Entrepreneurs create their own path to success and work to make their dreams reality. This program teaches students the skills and behaviors that contribute to personal and business success. It also prepares students to assess new enterprise opportunities, obtain financial resources, prepare a business plan and market a venture for success. Students will gain the confidence and skills to launch a new venture in an area of expertise, grow an existing business or pursue an advanced degree.

<table>
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<th>Course Title</th>
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<td>MKTG1110</td>
<td>Customer Service</td>
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**Business Entrepreneurship Diploma - 33 credits**

**D O**

The primary purpose of this program is to prepare students for management or ownership of a small business. The program not only prepares students for business management but also enables them to better manage their own personal affairs. It especially will help individuals who may have some of the skills and competencies needed but lack the organization and understanding of business management that is necessary to be successful. Upon completing the classroom work, students will be assisted in finding jobs with business firms offering employment suited to their individual career objectives or in starting their own businesses. This program will help students cultivate their entrepreneurial spirit; that is, a strong desire to be their own boss and a willingness to expend above-average time and energy toward goal accomplishment.

<table>
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**Program Profiles**

- **BUS1175**
- **BUS2202**
- **BUS2204**
- **BUS2206**
- **BUS2275**
- **COMM1140**
- **ECN2210**
- **ECN2222**
- **ENGL1101**
- **PHIL1201**
- **PSYC1200**
## Entrepreneur Essentials

### Certificate - 9 credits

**D O**

Entrepreneurs create their own paths to success and work to make their dreams a reality. This certificate teaches students the necessary skills and behaviors that contribute to launching and managing a new business with a strong focus on business ethics. Students will learn to assess new enterprise opportunities, enhance management skills and prepare a business plan.

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<td>ENTR2220</td>
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</table>

## Entrepreneurial Fundamentals

### Certificate - 9 credits

**D O**

Entrepreneurs create their own paths to success and work to make their dreams a reality. This certificate teaches students the necessary skills and behaviors that contribute to launching a new business. Students will learn to assess new enterprise opportunities, obtain financial resources, understand the importance of customer service and prepare a business plan.

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## Entrepreneurship

### Certificate - 18 credits

**C D O**

Entrepreneurs create their own paths to success and work to make their dreams a reality. This certificate was created to give a basic entrepreneurship education to someone who is technically proficient but has not taken business or entrepreneurship courses. Students will learn to assess new enterprise opportunities, obtain financial resources, prepare a business plan and market a venture for success.

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<td>Introduction to Computer Technology</td>
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<td>Business Plan Development</td>
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## Human Resources

### Associate of Applied Science (AAS) - 60 credits

**M O**

Human resources programs prepare students to provide support to companies and individual employees in the area of human resources. Associate of Applied Science graduates may assume duties in the following areas: communication with employees, employee data record-keeping, policies and administration, employer and labor relations, employee recruitment, selection and employment, training and development, wage and salary, and benefit administration.

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### Payroll Specialist

#### Diploma - 33 credits

**D M O**

This program provides the knowledge and skills necessary to perform routine calculating, journalizing, posting and verifying duties to maintain accounting records and to prepare payroll reports and returns and employee records. Both manual and computerized accounting concepts and applications are included.

<table>
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CPTR1104 Introduction to Computer Technology .................. 3
HRES1122 Human Resource Management ......................... 3
HRES1130 Benefits Administration ........................................ 3
PDEV1102 Contemporary Career Search ............................... 1

**Spring Start**

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<td>Spreadsheet Applications ...................................</td>
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<td>HRES1122</td>
<td>Human Resource Management ..................................</td>
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<td>HRES1130</td>
<td>Benefits Administration .....................................</td>
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</tr>
<tr>
<td>PDEV1102</td>
<td>Contemporary Career Search ..............................</td>
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</table>

---

**Professional Sales Skills**

**Certificate - 9 credits**

D O

This certificate prepares students to enhance their selling, customer service and speaking skills. It also is designed to provide new sales professionals with the foundational skills for success. This certificate includes courses in public speaking, selling strategies and customer service.

<table>
<thead>
<tr>
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<td>COMM1120</td>
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<td>MKTG1106</td>
<td>Professional Selling .....................................</td>
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<tr>
<td>MKTG1110</td>
<td>Customer Service .........................................</td>
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</table>

---

**Supervisory Leadership Essentials**

**Certificate - 18 credits**

D F M W

This certificate prepares students to enhance their selling, customer service and speaking skills. It also is designed to provide new sales professionals with the foundational skills for success. This certificate includes courses in public speaking, selling strategies and customer service.

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<td>Administrative Project Management .....................</td>
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<tr>
<td>CPTR1104</td>
<td>Introduction to Computer Technology ..................</td>
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<tr>
<td>MKTG1110</td>
<td>Customer Service .........................................</td>
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<tr>
<td>MKTG1138</td>
<td>Leadership Development I ..................................</td>
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<td>MKTG2214</td>
<td>E-Marketing ..................................................</td>
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<td>SUP1110</td>
<td>Budget and Financial Management ......................</td>
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<td>SUP1118</td>
<td>Lead and Facilitate Teams ..................................</td>
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<td>BUS2204</td>
<td>Principles of Management ..................................</td>
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<td>COMM1140</td>
<td>Interpersonal Communication ............................</td>
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<td>HRES1122</td>
<td>Human Resource Management ................................</td>
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<td>Architectural Drafting Diploma</td>
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<td>Architectural Drafting and Design AAS</td>
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<td>Commercial Refrigeration Diploma</td>
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<td>Construction Management AAS</td>
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<td>Diesel Equipment Technology AAS (Case IH &amp; New Holland Sponsored)</td>
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<td>Diesel Equipment Technology AAS (Generic Option)</td>
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<td>Diesel Equipment Technology AAS (Truck Option)</td>
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<td>Diesel Equipment Technology Diploma</td>
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<td>Drafting and 3D Technologies AAS</td>
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<td>Drafting and 3D Technologies Diploma</td>
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<td>Electrical Line Worker Technology AAS</td>
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<td>Electrical Technology - Electrician Emphasis Diploma</td>
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<td>Engineering AS</td>
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<td>Gas Utility Construction and Service Diploma</td>
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<tr>
<td>Heating, Ventilation and Air Conditioning/Refrigeration Diploma</td>
<td>86</td>
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<tr>
<td>Industrial Workplace Certificate</td>
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<tr>
<td>Marine Engine Technology AAS</td>
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<td>Marine Engine Technology Diploma</td>
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<tr>
<td>Marine/Powersports Maintenance Specialist Certificate</td>
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<tr>
<td>Plumbing Technology Diploma</td>
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<tr>
<td>PowerSports Technology Certificate</td>
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<td>PowerSports Technology Diploma</td>
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<tr>
<td>Survey Technician Diploma</td>
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</table>
Architectural Drafting

**Diploma - 35 credits**

Students completing this program will be prepared to obtain employment with architectural and engineering firms, contractors and a variety of manufacturing and distributing companies related to the construction industry. Computer-aided drafting is an important tool for the construction industry and the design professions and is an important part of the Architectural Drafting program. This program teaches students the principles of residential and commercial building technology, as well as the drafting skills to apply them.

**Course #** | **Course Title** | **Crs**
--- | --- | ---
ARCH1122 | Computer Aided Drafting for Architecture | 4
ARCH1126 | Residential Project I | 3
ARCH2248 | CADD Alternatives | 3
BLDG1114 | Blueprint Reading I | 2
CADD1000 | AutoCAD Basics | 3
CIVL1100 | Survey I: Fundamentals of Surveying | 3
COMM1124 | Building Systems | 3
COMM2206 | Building Codes | 2
ENGL1101 | College Writing | 3
ENGT1118 | Construction and Manufacturing Math | 3
ENGT1136 | Engineering Graphics | 3
ENGT1134 | Office Systems and Equipment | 3

Automotive Service Technology

**Associate of Applied Science (AAS) - 72 credits**

Students completing this program will be prepared to obtain employment with architectural and engineering firms, contractors and a variety of manufacturing and distributing companies related to the construction industry. Computer-aided drafting is an important tool for the construction industry and the design professions and is an important part of the Architectural Drafting program. This program teaches students the principles of residential and commercial building technology, as well as the drafting skills to apply them. Students also will be enrolled in general education courses selected to complement their technical education. This degree can allow students to continue their education in a number of baccalaureate programs at four-year institutions.

**Course #** | **Course Title** | **Crs**
--- | --- | ---
ARCH1122 | Computer Aided Drafting for Architecture | 4
ARCH1126 | Residential Project I | 3
ARCH2226 | Residential Project II | 4
ARCH2232 | Civil and Structural Integration | 3
ARCH2236 | Architectural Presentation | 2
ARCH2242 | Mechanical and Electrical Integration | 3
ARCH2244 | Commercial Projects | 4
ARCH2248 | CADD Alternatives | 3
ARCH2250 | Project Administration | 2
BLDG1114 | Blueprint Reading I | 2
CADD1000 | AutoCAD Basics | 3
CIVL1100 | Survey I: Fundamentals of Surveying | 3
COMM1120 | Introduction to Public Speaking | 3
COMM1108 | Principles of Estimating | 4
COMM1124 | Building Systems | 3
COMM2206 | Building Codes | 2
ENGL1101 | College Writing | 3
ENGT1100 | Introduction to Building Information Modeling | 3
ENGT1118 | Construction and Manufacturing Math | 3
ENGT1126 | Engineering Graphics | 3
ENGT1134 | Office Systems and Equipment | 3

**Associate of Applied Science (AAS) - 72 credits**

The automotive service technician works in an exciting and rapidly changing industry. Students in this program will be trained to perform the service and diagnostic procedures necessary to keep vehicles operating properly. Students are trained in modern laboratories equipped with current service and testing equipment. Students entering this program should have good mechanical aptitude, good communication skills and the ability to read and comprehend service literature. Graduates of this program will have a variety of opportunities including drive line technician, driveability technician, alignment and suspension specialist, transmission specialist, service adviser and manager. Opportunities for advancement may include factory and dealer representatives, management and self-employment.

**Course #** | **Course Title** | **Crs**
--- | --- | ---
AMST1102 | General Education w/MnTC Goals | 6
AMST1105 | Alignment and Suspension I | 3
AMST1110 | Batteries, Starting and Charging Systems | 2
AMST1111 | Automotive Electronics | 3
AMST1122 | Engines I | 3
AMST1126 | Engines II | 3
AMST1132 | Drive Trains I | 3
AMST1136 | Drive Trains II | 3
AMST2201 | Alignment and Suspension II | 3
AMST2206 | Body Electrical and Mechanical I | 3
AMST2210 | Body Electrical and Mechanical II | 2
AMST2211 | Exhaust Analysis Fuel Systems | 3
AMST2214 | Electronic Powertrain Control I | 3
AMST2218 | Electronic Powertrain Control II | 3
AMST2220 | Ignition Systems | 3
AMST2225 | Brakes II | 3
AMST2233 | Auto Transmission I | 3
AMST2237 | Auto Transmission II | 3
AMST2240 | Heating Ventilation and Air Conditioning | 3
TRNS1102 | Introduction to Transportation | 2

**Course #** | **Course Title** | **Crs**
--- | --- | ---
AMST1102 | General Education w/MnTC Goals | 9
AMST1105 | Alignment and Suspension I | 3
AMST1110 | Batteries, Starting and Charging Systems | 2
AMST1111 | Automotive Electronics | 3
AMST1122 | Engines I | 3
AMST1126 | Engines II | 3
AMST1132 | Drive Trains I | 3
AMST1136 | Drive Trains II | 3
AMST2201 | Alignment and Suspension II | 3
AMST2206 | Body Electrical and Mechanical I | 3
AMST2210 | Body Electrical and Mechanical II | 2
AMST2211 | Exhaust Analysis Fuel Systems | 3

**Diploma - 66 credits**

**Course #** | **Course Title** | **Crs**
--- | --- | ---
AMST1102 | General Education w/MnTC Goals | 9
AMST1105 | Alignment and Suspension I | 3
AMST1110 | Batteries, Starting and Charging Systems | 2
AMST1111 | Automotive Electronics | 3
AMST1122 | Engines I | 3
AMST1126 | Engines II | 3
AMST1132 | Drive Trains I | 3
AMST1136 | Drive Trains II | 3
AMST2201 | Alignment and Suspension II | 3
AMST2206 | Body Electrical and Mechanical I | 3
AMST2210 | Body Electrical and Mechanical II | 2
AMST2211 | Exhaust Analysis Fuel Systems | 3

**Diploma - 66 credits**

**Course #** | **Course Title** | **Crs**
--- | --- | ---
AMST1102 | General Education w/MnTC Goals | 9
AMST1105 | Alignment and Suspension I | 3
AMST1110 | Batteries, Starting and Charging Systems | 2
AMST1111 | Automotive Electronics | 3
AMST1122 | Engines I | 3
AMST1126 | Engines II | 3
AMST1132 | Drive Trains I | 3
AMST1136 | Drive Trains II | 3
AMST2201 | Alignment and Suspension II | 3
AMST2206 | Body Electrical and Mechanical I | 3
AMST2210 | Body Electrical and Mechanical II | 2
AMST2211 | Exhaust Analysis Fuel Systems | 3

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877.450.3322
Construction Management

Associate of Applied Science (AAS) - 66 credits

M

The Construction Management program prepares graduates for a variety of careers in construction including management, supervision, estimating, testing and safety. The program focuses on the flow of labor, material, equipment, time and finances from the conception of a project through completion. Students are trained in a combination of skills in construction, business and management. This degree also allows students to continue their education in a baccalaureate program at participating four-year institutions.

Course # | Course Title | Crds
---|---|---
ACCT1101 | Payroll | 3
BUS2204 | Principles of Management | 3
CONM1102 | Business Law | 3
CONM2210 | Introduction to the Construction Trades | 3
CSCI1110 | Introduction to Computer Technology | 3
ENG1101 | College Writing | 3
ENG1115 | Professional and Technical Writing | 3
ENG1118 | Construction and Manufacturing Math | 3
ENG1226 | Engineering Graphics | 3
MCD2206 | Mechanical Engineering Drawing IV | 2

COMM1120 | Introduction to Construction Law | 3
COMM1130 | Small Group Communication | 3
BIO1107 | Environmental Science issues | 3
CADD1102 | Fundamentals of CADD | 4
CONM1101 | Construction Documents and Codes | 3
CONM1102 | Site/Building Layout | 2
CONM1104 | Construction Management Principles | 3
CONM1108 | Principles of Estimating | 4
CONM1124 | Building Systems | 3
CONM2204 | Materials Testing | 3
CONM2210 | Construction Scheduling | 3
CONM2212 | Site Management | 3
CONM2213 | Safety Management | 2
CONM2221 | Computer Estimating and Bidding | 2
CONM2222 | Construction Management Internship | 2
ENG1101 | College Writing | 3
ENG1215 | Professional and Technical Writing | 3
ENG1118 | Construction and Manufacturing Math | 3
ENG1126 | Engineering Graphics | 3
MCD2206 | Mechanical Engineering Drawing IV | 2

Civil Engineering Technology

Associate of Applied Science (AAS) - 60 credits

D

Students completing the Civil Engineering Technology program are prepared for employment in the civil engineering field. Civil engineering technicians plan, design and monitor construction and maintain public or private works systems with the collaboration and direction of engineers. They gather preliminary data, plan, budget, survey, design, prepare construction documents and administer contracts to provide safe and convenient facilities including highways, bridges, airports, structures, water treatment and distribution systems, and waste water collection and treatment systems. Opportunities are available with state, county and local government public works departments, as well as consulting engineering firms. Students will learn graphic communication skills, advanced surveying techniques and a variety of skills related to engineering technologies. Students also will be enrolled in general education classes selected to build a foundation for their technical courses. This AAS degree can prepare students to continue their education in a number of baccalaureate programs at four-year institutions.

Course # | Course Title | Crds
---|---|---
CADD1000 | General Education with MnTC Goals | 9
CIVL1119 | Survey I: Fundamentals of Surveying | 3
CIVL1120 | Survey II: Land Surveys | 3
CIVL1138 | CADD II: Plan Layout | 3
CIVL2205 | Construction Inspection | 3
CIVL2210 | Road Design | 3
CIVL2230 | Civil Engineering Technology Internship | 3
CIVL2234 | Utility Design | 3
CIVL2238 | CADD III: Project Design | 3
CIVL2240 | Introduction to Geographic Information Systems | 3
CIVL2346 | Introduction to Hydrology | 3
COMM1122 | Introduction to Public Speaking | 3
COMM2204 | Materials Testing | 3
ENGL1101 | College Writing | 3
ENGT1118 | Construction and Manufacturing Math | 3
ENGT1126 | Engineering Graphics | 3
ENGT1134 | Office Systems and Equipment | 3

Commercial Refrigeration

Diploma - 35 credits

M

Students in this program will gain the skills and knowledge to be able to service and maintain commercial refrigeration equipment, which includes walk-in coolers and freezers, grocery stores, and ice-makers. Students will gain skills in layout, installation, and repair. Employment exists with manufacturers, engineers, contractors, and specialized service firms. Students learn to research and develop applications of more efficient, cost-effective equipment and procedures. The knowledge to design, install, and maintain these special environments for people, products, and perishables is essential today.

Course # | Course Title | Crds
---|---|---
COMM1130 | Small Group Communication | 3
REFR2202 | Commercial Refrigeration and Air Conditioning Principles | 3
REFR2204 | Commercial Refrigeration and Air Conditioning Lab | 3
REFR2206 | Commercial Electrical Principles | 3
REFR2208 | Commercial Electrical Lab | 3
REFR2211 | Advanced Refrigeration Principles | 4
REFR2212 | Commercial Refrigeration Lab | 3
REFR2213 | Advanced Electrical Theory | 3
REFR2215 | Advanced Electrical Applications | 3
REFR2216 | Refrigeration Internship | 3
REFR2217 | Commercial Grocery Store Refrigeration | 3

Diesel Equipment Technology

Associate of Applied Science (AAS) - 79 credits

M

The diesel equipment technician works in an exciting and rapidly changing industry. This program prepares individuals to diagnose and repair diesel engines, clutches and transmissions, hydraulic systems, and auxiliary components, which include electronic fuel systems and transmissions, and involves instruction in the use of a variety of tools and diagnostic testing equipment. Students are prepared for careers in the maintenance of trucks and trailers, farm equipment, construction equipment, stationary diesel engines in electrical generators and other related equipment. About two-thirds of the instruction time is spent in the diesel lab working on live work and training models. Students learn to diagnose problems and disassemble, recondition and replace faulty parts, and get hands-on training in all program areas. This program is an Association of Diesel Specialists TechSmart program participant.

CASE NEW HOLLAND sponsored

Course # | Course Title | Crds
---|---|---
COMM1120 | Introduction to Public Speaking | 3
COMM1130 | Small Group Communication | 3
COMM1140 | Interpersonal Communication | 3
COMM1122 | CPR-First Aid | 1
DCHN1118 | CNH (Case New Holland) Supervised Occupational Experience (SOE) I | 3
DCHN1121 | CNH (Case New Holland) Supervised Occupational Experience (SOE) II | 7
DCHN2210 | Mobile Hydraulics | 4
DCHN2218 | CNH (Case New Holland) Supervised Occupational Experience (SOE) III | 3

3 credits from the following:

H (Case New Holland) Supervised Occupational Experience (SOE) I | 3
H (Case New Holland) Supervised Occupational Experience (SOE) II | 7
H (Case New Holland) Supervised Occupational Experience (SOE) III | 3

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**General Option**

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<td>DSET1100</td>
<td>Diesel Equipment Fundamentals</td>
<td>3</td>
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<tr>
<td>DSET1101</td>
<td>Software Systems in Transportation</td>
<td>2</td>
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<td>DSET1106</td>
<td>Fuel Systems</td>
<td>2</td>
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<tr>
<td>DSET1110</td>
<td>Power Train I</td>
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<td>DSET1112</td>
<td>Hydraulics I</td>
<td>4</td>
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<td>DSET1124</td>
<td>Diesel Shop Management</td>
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<td>DSET1129</td>
<td>Trans Elec/Start/Charge</td>
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<tr>
<td>DSET1132</td>
<td>Introduction to Engine Theory</td>
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<td>DSET1134</td>
<td>Introduction to Engines</td>
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<td>DSET1144</td>
<td>Electrical Troubleshooting</td>
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<td>DSET2204</td>
<td>Advanced Electrical and Emission Systems</td>
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<td>ECON1150</td>
<td>Essentials of Economics</td>
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<td>Professional and Technical Writing</td>
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<td>SOC1111</td>
<td>Introduction to Sociology</td>
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<td>TRNS1112</td>
<td>Heating Ventilation A/C</td>
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**Truck Option**

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<td>DSET1105</td>
<td>Fuel Systems</td>
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<tr>
<td>DSET1110</td>
<td>Power Train I</td>
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<td>DSET1112</td>
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<td>DSET1124</td>
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<td>Introduction to Engine Theory</td>
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<tr>
<td>ECON1150</td>
<td>Essentials of Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Drafting and 3D Technologies**

**Associate of Applied Science (AAS) - 66 credits**

The Drafting and 3D Technologies program prepares students for employment in a wide variety of engineering-related disciplines. Students are trained across multiple two-dimen- sional and three-dimensional software platforms to generate drawings of parts, assemblies and layouts, as well as other manufacturing and construction-related documentation specifically required by employers. The curriculum incorporates 3D printing, 3D scanning and rapid prototyping as tools for taking student designs from computer models to three-dimensional solids. Graduates of the program enter the workforce as mechanical drafters, designers and engineering technicians. The degree is fully transferable to the Operations Management program at Minnesota State University Moorhead.

<table>
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<th>Course Title</th>
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<td>AutoCAD Basics</td>
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<td>CAD1100</td>
<td>Solid Modeling with AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>CAD2000</td>
<td>Introduction to SolidWorks</td>
<td>2</td>
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<tr>
<td>CAD2120</td>
<td>Introduction to Autodesk Inventor</td>
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</tr>
<tr>
<td>COMM1120</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Diesel Equipment Technology**

**Diploma - 65 credits**

The diesel equipment technician works in an exciting and rapidly changing industry. Students in this program receive the diagnostic and service training needed to be successful in their chosen field. Entering students should have good mechanical aptitude, good communication skills and the ability to comprehend service literature. The program prepares individuals to diagnose and repair all components, including diesel engines, transmissions, drive lines, differentials, hydraulic and air brake systems, electrical systems, electronically controlled fuel systems and transmissions. Students receive instruction in the use of a wide variety of tools and diagnostic testing equipment. Students are prepared for careers requiring them to inspect, diagnose, repair and maintain trucks, trailers, farming equipment, diesel and construction equipment, stationary diesel engines in electrical generators and related equipment. Instruction includes diagnosing, disassembling, repairing and adjusting systems and parts, vehicle service, air brake systems, brakes, starting and suspension systems, wheel alignment, fuel systems, differentials, electronic fuel control, clutch and transmissions, air conditioning and refrigeration. About two-thirds of the instruction time is spent in the diesel lab working on live work and training models. Students learn to diagnose problems and disassemble, recondition and replace faulty parts, and they get hands-on training on such components as electrical, transmissions, air conditioning, brakes, fuel sys- tems, transmissions and engines. This program is an Association of Diesel Specialists TechSmart program participant.

<table>
<thead>
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<th>Course Title</th>
<th>Creds</th>
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<td>DSET2214</td>
<td>Suspension and Alignment</td>
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<td>DSET2218</td>
<td>Advanced Fuels</td>
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<tr>
<td>BIOL1107</td>
<td>Environmental Science Issues</td>
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<td>COMM1120</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
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<tr>
<td>CPIR1100</td>
<td>Fundamental Computer Concepts</td>
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<tr>
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<tr>
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</table>
Drafting and 3D Technologies

Diploma - 60 credits

M

The Drafting and 3D Technologies program prepares students for employment in a wide variety of engineering-related disciplines. Students are trained across multiple two-dimensional and three-dimensional software platforms to generate drawings of parts, assemblies, and layouts, as well as other manufacturing and construction-related documentation specifically required by employers. The curriculum incorporates 3D printing, 3D scanning and rapid prototyping as tools for taking student designs from computer models to three-dimensional solids. Graduates of the program are prepared to enter the workforce as mechanical drafters, designers and engineering technicians.

Course #  Course Title                      Credits
CADD1000                                   General Education                      9
CADD1100                                   AutoCAD Basics                        3
CADD1110                                   Solid Modeling with AutoCAD           2
CADD2110                                   Introduction to SolidWorks            2
CADD2120                                   Introduction to Autodesk Inventor      2
ENG1118                                    Construction and Manufacturing Math   3
MCD1104                                   Mechanical Engineering Drawing I       4
MCD1106                                   Mechanical Engineering Drawing II      4
MCD2112                                   Geometric Dimensioning and Tolerancing 2
MCD2220                                   Advanced Modeling with Solidworks      3
MCD2220                                   Mechanical Engineering Drawing III      4
MCD2222                                   3D Printing and Prototyping            2
MCD2246                                   Tool Design                            3
MCD2252                                   Mechanical Drafting Applications II    4
MCD2254                                   Computer Numerical Control             2
SOC1111                                    Introduction to Sociology                3

Electrical Line Worker Technology

Associate of Applied Science (AAS) - 68 credits

W

The Electrical Line Worker Technology program provides trained personnel for the power industry. Coursework provides both theory and practical hands-on experience in all phases of power line construction and maintenance. Coursework includes electrical math, national electrical safety codes, construction of overhead and underground distribution systems, conductor applications, over-voltage and over-current protection, guying and pole grounding. The 90-acre training field located near the Wadena campus provides a site for hands-on experience in pole setting. The successful graduate is eligible for employment in rural electric and municipal utilities or with private contractors.

Course #  Course Title                      Credits
ELWT1112                                   Electrical Line Worker Internship       3
ELWT1107                                   Environmental Science Issues           3
ELEC1102                                   Introduction to Electric Circuit Theory 4
ELEC2234                                   Hydraulics/Pneumatics                   2
ELWT1102                                   Electrical Line Worker Theory I          4
ELWT1101                                   Electrical Structure Installation       5
ELWT1106                                   Climbing Electrical Structure           4
ELWT1108                                   Construction of Overhead Structures     3
ELWT1109                                   Line Worker Theory II                    4
ELWT1112                                   Transformers                            2
ELWT1114                                   Line Construction Reports                2
ELWT1116                                   Pole Top and Bucket Rescue              1
ELWT1118                                   Field Construction I                     3
ELWT1120                                   Field Construction II                    3
ENGL1101                                   College Writing                         3
ENST2222                                   Fundamentals of Utilities                3
ENST2223                                   Energy Safety Principles                 1
ENST2224                                   Blueprint Reading for Energy Industry    2
ENST2225                                   GPS Mapping                             1
MATH1114                                   College Algebra                         4
PSYC1101                                   Human Interaction                        3
SUPL1118                                   Lead and Facilitate Teams                3

Electrical Line Worker Technology

Diploma - 36 credits

B W

The Electrical Line Worker program provides trained personnel for the power industry. Coursework provides both theory and practical hands-on experience in all phases of power line construction and maintenance. Coursework includes electrical math, national electrical safety codes, construction of overhead and underground distribution systems, conductor applications, over-voltage and over-current protection, guying and pole grounding. The 90-acre training field located near the campus provides a site for hands-on experience in pole setting. The successful graduate is eligible for employment in rural electric and municipal utilities or with private contractors.

Course #  Course Title                      Credits
ELWT1112                                   Field Construction III                   3
ELWT1103                                   Electrical Line Worker Internship        2
ELWT1106                                   Climbing Electrical Structure            4
ELWT1101                                   Electrical Structure Installation        5
ELWT1116                                   Pole Top and Bucket Rescue               1
ELWT1118                                   Field Construction I                      3
ELWT1120                                   Field Construction II                     3
ELWT1112                                   Transformers                             2
ELWT1122                                   Construction of Overhead Structures      3
ELWT1114                                   Line Construction Reports                2
### Gas Utility Construction and Service

**Diploma - 32 credits**

W

The Gas Utility Construction and Service program prepares students to install, maintain and operate both high- and low-pressure natural gas distribution systems that are used to supply residential, commercial and industrial companies. Program graduates will be qualified to enter one of the most technologically intensive industries in today's economy with potential careers in gas construction mechanics, gas meter mechanics, gas service mechanics, gas clerk estimation, gas regulator maintenance mechanics, gas appliance repair and underground facilities location.

### Heating, Ventilation and Air Conditioning/Refrigeration

**Diploma - 36 credits**

M W

Students in this program work with both residential and light commercial heating, ventilation, ducting, air conditioning and refrigeration equipment. This extensive background, together with hands-on skills in layout, fabrication, installation and repair, qualifies graduates to enter one of the world's fastest-growing industries. Employment exists with manufacturers, engineers, contractors and specialized service firms. Students learn and develop applications skills of more efficient, cost-effective equipment and their application procedures. Many new, exciting and energy-saving innovations are being developed. Technicians train in this industry to provide the latest technologies to control the environment in any enclosed area, from residential homes to light commercial buildings. This includes controlling indoor air quality by utilizing mechanical means to remove pollutants and maintain desired humidity and temperature settings.

### Electrical Technology-Wadena

#### Course Catalog 2017-2018

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<td>MATH1000</td>
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### Engineering

#### Associate of Science (AS) - 60 credits

**F M**

The Associate of Science in Engineering consists of the sequential math, physics and other science courses which will transfer to either a BS in physics or to diverse engineering programs at many four-year colleges and universities. An AS in Engineering will also open an option for technical jobs in the upcoming new energy sector. In general, a degree in engineering has been and will continue to be an excellent platform for success across a wide range of careers in the private sector, government, schools, colleges and universities.

#### Engineering - Associate of Science (AS) (Mhd)

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<td>COMM1120</td>
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877.450.3322

Minnesota State Community and Technical College
Course Catalog 2017-2018
Industrial Workplace Readiness

Certificate - 18 credits

M

This certificate is designed to ensure that students are workplace-ready for the industrial workplace. This course of study will provide basic communication, computer, technical math and safety skills, as well as elective technical skills needed in the industrial workplace. In addition, students will be introduced to the work habits and attitudes that lead to success in the industrial workplace.

Course # | Course Title | Creds
--- | --- | ---
3 credits from the following:
COMP1100 | Power and Communications in Human Relations | 3
COMM1130 | Small Group Communication | 3
COMP2230 | Intercultural Communication | 3
9 credits from the following:
BUSI120 | Spreadsheet and Database Concepts | 3
CADD1102 | Fundamentals of CADD | 4
CHEM1100 | Fundamental Concepts of Chemistry | 3
CPT1104 | Introduction to Computer Technology | 3
ENG1100 | Project Management | 1
IHS1293 | OSHA 10-Hour General Industry Safety | 3
IHS2293 | OSHA 30-Hour General Industry Safety | 2
IHM1111 | Introduction to Power and Mechanical Systems | 2
IMMA1112 | Mechanical Blueprint Reading | 2
IND1100 | Food Manufacturing Science | 3
IND1501 | Basic Steel Welding | 4
METC1118 | | 3
METC2270 | | 3
OPT1100 | | 3
PHIL1201 | Ethics | 3
IND1110 | Introduction to the Industrial Workplace | 3
MATH1000 | Technical Mathematics | 3

Marine Technology

Certificate - 30 credits

D

Marine engine technicians work in an exciting, rapidly changing and growing industry. The Marine Engine Technology certificate program is designed to educate individuals to become competent marine technicians. The primary focus of the program is training students to be well-versed in marine systems, both outboard and stern-drive. Students will perform service on modern marine equipment using special test equipment and tools. Students will learn how to plan and perform repairs according to the various manufacturers’ recommended procedures. The perfect program for the individual to start a marine career as an entry level technician.

Course # | Course Title | Creds
--- | --- | ---
MRNT1101 | Drive System Theory | 3
MRNT1100 | Introduction to Marine Systems | 2
MRNT1106 | Drive System Service | 3
MRNT2238 | Marine Four-stroke Outboard Engine Service | 2
TRNS1100 | Introduction to Shop Technology | 4
TRNS1104 | Transportation Electronics | 3
TRNS1125 | Starting and Charging Theory | 2
TRNS1126 | Starting and Charging Lab | 1
TRNS1193 | Fuel Systems II Lab | 1
TRNS1194 | Fuel Systems II Theory | 2
TRNS1197 | Electrical Systems I Lab | 2
TRNS1198 | Electrical Systems I Theory | 2

Marine Engine Technology

Associate of Applied Science (AAS) - 69 credits

D

The Marine Engine Technology AAS is designed to train individuals to become competent marine technicians. The primary focus of the program is the diagnosis, service and repair of outboard, stern drive and inboard engines. Propulsion, electrical and trailer systems also are covered. Students will service modern marine equipment using special tools and testing procedures to increase their profitability as trained technicians. As part of the program, students will have the opportunity to earn factory certification from major marine engine manufacturers. Career opportunities include working as a technician in a dealership, with many having opportunities to move into management, self-employment and factory representative positions.

Course # | Course Title | Creds
--- | --- | ---
MRNT1107 | Drive Systems I | 3
MRNT1114 | Introduction to Boat Rigging | 3
MRNT2201 | Marine Internship | 1
MRNT2207 | Engine Systems | 3
MRNT2205 | Marine Advanced Fuel Systems | 3
MRNT2206 | Electronic Fuel Injection (EFI) Systems | 3
MRNT2211 | Engine Service | 2
MRNT2218 | Advanced Electrical Diagnosis | 1
MRNT2218 | Advanced Electrical Diagnosis | 1
MRNT2218 | Advanced Electrical Diagnosis | 1
MRNT2227 | Transom Plate and Mid-Sections I | 2
MRNT2228 | Transom Plate and Mid-Sections II | 2
MRNT2233 | Engine Performance Rebuild and Diagnostics | 4
TRNS1001 | Fuel Systems I | 3
TRNS1005 | Off-Road Electrical Systems | 2
TRNS1006 | Off-Road Vehicle Maintenance | 2
TRNS1007 | Off-Road Vehicle Maintenance | 2
TRNS1015 | Ignition, Charging and Starter Systems Lab | 1
TRNS1016 | Ignition, Charging and Starter Systems Theory | 1
TRNS1102 | Introduction to Transportation | 2
TRNS1104 | Transportation Electronics | 3
TRNS1193 | Fuel Systems II Lab | 1
TRNS1194 | Fuel Systems II Theory | 2

minnesota.edu
Marine/Powersports Maintenance Specialist

Certificate - 16 credits
D

The purpose of this certificate is for the student to gain mechanical confidence in marine and powersport products. This will allow the student to attain an entry-level position at a local dealership. This certificate also can be applied to recreational outdoor powersport or boating enthusiasts who want to get a grasp on maintaining their own equipment. This is a beginners certificate to build the mechanical abilities needed when working on recreational products.

<table>
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</tbody>
</table>

Plumbing Technology

Diploma - 36 credits
M

The Plumbing Technology program is designed for apprentice plumbers and others entering a plumbing career. It begins with safety, tools and materials used in the industry with a strong emphasis on the Minnesota Plumbing Code and the North Dakota Plumbing Code covering both residential and commercial installation practices and standards. An introduction to blueprints and isometric drawings will be presented, as well as backflow prevention theory and devices. Graduates will be eligible for applicable hours on their apprenticeship card.

<table>
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<td>PLBG1101</td>
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PowerSports Technology

Certificate - 30 credits
D

Students who wish to become skilled PowerSports mechanics must be capable of diagnosing mechanical failures quickly and accurately if they are to be in a position to repair the job at a fair salary return. Most types of two- and four-cycle small engines that are currently used to power lawn mowers, snowblowers, generators, garden tractors, rototillers, snowmobiles, ATVs and personal watercraft will be covered. Students who perform satisfactorily may find employment as service technicians, sales personnel and factory representatives, or they may wish to enter business for themselves. This program requires a mechanical aptitude and the ability to read and comprehend technical service manuals, understand and perform a variety of diagnostic procedures, and work well with fellow employees and customers. Many industry training opportunities are available.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Crds</th>
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<tbody>
<tr>
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<td>Snowmobile Clutching</td>
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<td>Chainsaws and Generators</td>
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<td>PWST2304</td>
<td>Motorcycles I</td>
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<td>PWST2306</td>
<td>Snowmobile Drives and Suspensions</td>
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<td>PWST2308</td>
<td>Advanced Snowmobiles</td>
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<td>Advanced Motorcycle Systems</td>
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<tr>
<td>TRNS1001</td>
<td>Fuel Systems I</td>
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<tr>
<td>TRNS1003</td>
<td>Off-Road Literature and Computer Systems</td>
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<td>TRNS1005</td>
<td>Off-Road Electrical Systems</td>
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<td>Off-Road Vehicle Maintenance</td>
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<td>TRNS1015</td>
<td>Ignition, Charging and Starter Systems Lab</td>
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<td>TRNS1016</td>
<td>Ignition, Charging and Starter Systems Theory</td>
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<td>Transportation Electronics</td>
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<td>TRNS1194</td>
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</table>

Survey Technician

Certificate - 30 credits
D

This certificate program provides the student with a basic study of civil engineering surveying including survey equipment setup and training, surveying principles and an introduction to civil engineering survey practices and uses. The Survey Technician program includes knowledge and training in property and land surveys, construction project design, field training in level surveys, total station and global positioning equipment, and road design and construction principles.

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<td>AutoCAD Basics</td>
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<td>CVIL1100</td>
<td>Survey I: Fundamentals of Surveying</td>
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<tr>
<td>CVIL1119</td>
<td>Survey II: Land Surveys</td>
<td>3</td>
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<td>CVIL1138</td>
<td>CADD II: Plan Layout</td>
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<td>CVIL2209</td>
<td>Construction Inspection</td>
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<tr>
<td>CVIL2210</td>
<td>Road Design</td>
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<td>College Writing</td>
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<tr>
<td>ENGT1118</td>
<td>Construction and Manufacturing Math</td>
<td>3</td>
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<tr>
<td>ENGT1126</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ENGT1134</td>
<td>Office Systems and Equipment</td>
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</tbody>
</table>
Biological Sciences

Associate of Science (AS) - 60 credits

This degree is designed for students interested in the various fields of biological sciences such as cell biology, bioengineering, environmental science, fish and wildlife management, forestry, genetics and microbiology. Students majoring in biological sciences may also be interested in the following program areas: biochemistry, chemistry, pre-chiropractic, pre-dentistry, pre-medicine, pre-medical technology, pre-optometry, pre-pharmacy and pre-veterinary medicine. The curriculum should be used as a guide since required courses vary considerably among four-year institutions and professional schools. Students planning a degree in biological sciences or one of the above fields should contact the biology department and work with an advisor. A visit to the intended transfer institution by the spring of the first year is highly recommended.

Cardiovascular Technology - Invasive

Associate of Applied Science (AAS) - 60 credits

The Cardiovascular Technology - Invasive program prepares the graduate to be a competent entry-level cardiovascular technologist in the cognitive (knowledge), psychomotor (skill) and affective (behavior) learning domains for invasive cardiovascular technology. Students will learn to assist physicians in diagnosing and treating cardiac, peripheral vascular, neurovascular and electrophysiological conditions using current technology, physiological and diagnostic equipment, and therapeutic procedures.

Chemistry

Associate of Science (AS) - 60 credits

The Associate of Science in Chemistry consists of the sequential chemistry, math, physics and other courses which will transfer to either a BA or BS in chemistry or to diverse chemistry-related programs at many four-year colleges and universities. The career paths for chemistry majors are practically endless, depending on skills and interest. A chemistry major could lead to any of the following possibilities: laboratory research, forensic science, chemical engineering, medicine, health sciences, chemical industry, biotechnology, pharmaceuticals, environmental sciences, food science, law, hazardous waste management, geochemistry, metallurgy, consumer products and teaching. Many career options in chemistry require a bachelor’s or advanced degree. Students planning a degree in chemistry or one of the above fields should contact the chemistry department and work with a counselor or advisor to identify transfer options. A visit to the intended transfer institution by the spring of the first year is highly recommended.
The Dental Assisting program provides the knowledge necessary for the dental assistant to assist in performing general clinical assisting and support functions, intra-oral clinical procedures, business office procedures and laboratory tasks. The curriculum includes content in general studies; biomedical, dental and clinical sciences; clinical practice; and additional intra-oral clinical functions. Certain biomedical and dental science courses offered in the curriculum are common to both Dental Assisting and Dental Hygiene majors. Graduates are eligible to write the Dental Assisting National Board Certification Exam and the Minnesota State Board of Dentistry Registration Exam.

Dental Hygiene

Associate of Applied Science (AAS) - 88 credits

M

The Dental Hygiene program provides knowledge and skills to perform critical dental services that detect, prevent and treat diseases of the mouth while working as part of a dental team. Students who complete the program will leave with the skills to provide current, comprehensive dental hygiene services and may find employment in a variety of settings including private dental offices, schools, hospitals and public health clinics. Students interested in an advanced degree in dental hygiene or a related field have a number of transfer options to four-year colleges and universities. The Minnesota Board of Dentistry requires BCA and FBI criminal background checks and fingerprint analysis prior to initial licensure in the state of Minnesota.

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<td>BIOL260</td>
<td>Human Anatomy and Physiology I</td>
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</tr>
<tr>
<td>BIOL262</td>
<td>Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL267</td>
<td>Medical Microbiology</td>
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<tr>
<td>CHEM100</td>
<td>Fundamental Concepts of Chemistry</td>
<td>3</td>
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<td>DENT100</td>
<td>Biomaterials</td>
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<td>DENT102</td>
<td>Dental Anatomy</td>
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<tr>
<td>DENT103</td>
<td>Introduction for Dental Health Care Providers</td>
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<tr>
<td>DENT104</td>
<td>Dental Health Care Providers II</td>
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<td>DENT106</td>
<td>Dental Radiology Lecture</td>
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<td>DENT122</td>
<td>Dental Ethics and Jurisprudence</td>
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<td>DNAS106</td>
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<td>DNAS114</td>
<td>Dental Practice Management</td>
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<td>DNAS119</td>
<td>Advanced Functions</td>
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<td>DNAS144</td>
<td>Dental Assisting Clinical Affiliations</td>
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<td>PSYC100</td>
<td>General Psychology</td>
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</table>

Health Information Technology/Coding

Associate of Applied Science (AAS) - 64 credits

O

The health information technician is an important member of the health care team who secures, analyzes, integrates and manages health information for patient care, performs diagnostic and procedure coding, utilizes electronic systems for reimbursement, planning and research activities, and maintains a legal patient record. This information steers the health care industry. The program is designed to combine general education and technical courses for a well-rounded and functional education. To further the student’s knowledge, the program utilizes Web-based educational electronic health record systems, and time is spent in health care facilities.
Medical Administrative Assistant

Associate of Applied Science (AAS) - 60 credits

The Medical Administrative Assistant AAS program prepares students to work in a variety of medical settings, handling all types of administrative duties for private practices, hospitals and clinics. This program offers a broad foundation of knowledge and skills, expanding the traditional role of the medical secretary through the addition of liberal arts classes as preparation for leadership roles. Graduates of this program are highly-trained office specialists who are prepared to accept responsibility for the coordination of medical office functions and patient billing processes. Successful medical administrative assistants have excellent communication skills and exhibit a high degree of professionalism. All courses in the program incorporate the skills needed for employment in the medical administrative assistant profession.

Medical Laboratory Technology

Associate of Science (AS) - 60 credits

Students learn to correlate test results with patients' conditions. In addition, students earn credits in general education, including anatomy and physiology, communications, chemistry and immunology and immunohematology.

The MLT program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).
Medical Office Assistant
Diploma - 44 credits
M O
Medical office assistants are highly trained office specialists who participate in the coordination of medical office functions including patient appointment scheduling, telephone communications, medical record maintenance, medical transcription and patient billing processes. Successful medical office assistants have excellent communication skills and exhibit a high degree of professionalism. All courses in the program incorporate the skills needed for employment in the medical office assistant profession.

<table>
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<tr>
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<td>ADMM1110</td>
<td>General Education w/MnTC Goals</td>
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<td>ADMM1112</td>
<td>Medical Documentation Fundamentals</td>
<td>4</td>
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<tr>
<td>ADMM1140</td>
<td>Medical Office Procedures</td>
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<tr>
<td>ADMM1150</td>
<td>Medical Language Applications</td>
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<tr>
<td>ADMM2120</td>
<td>Medical Office Technology Tools</td>
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<td>ADMM2130</td>
<td>Medical Office Career Insight</td>
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<td>ADMS1116</td>
<td>Business Communications I</td>
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<td>HLTH1116</td>
<td>Introduction to Anatomy and Physiology</td>
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</tr>
<tr>
<td>HLTH2208</td>
<td>Pathophysiology</td>
<td>3</td>
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</table>

Medical Receptionist
Diploma - 34 credits
M O
This program prepares individuals to work in a medical office setting. Medical receptionists greet patients, arrange appointments and provide informational services to patients. They possess excellent communication and technology skills. This position requires an excellent command of medical terminology, anatomy and physiology, as well as expertise in medical office procedures.

<table>
<thead>
<tr>
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<th>Course Title</th>
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<td>ADMM1122</td>
<td>Medical Office Procedures</td>
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<td>ADMM1140</td>
<td>Medical Language Applications</td>
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<tr>
<td>ADMM1150</td>
<td>Medical Billing/Insurance</td>
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<td>ADMM2120</td>
<td>Medical Office Technology Tools</td>
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<tr>
<td>ADMM2130</td>
<td>Medical Office Career Insight</td>
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<td>ADMM1116</td>
<td>Business Communications I</td>
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<td>HLTH1110</td>
<td>College Writing</td>
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<tr>
<td>HLTH1116</td>
<td>Introduction to Anatomy and Physiology</td>
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</tr>
<tr>
<td>HLTH2208</td>
<td>Pathophysiology</td>
<td>3</td>
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</tbody>
</table>

Medical Transcription
Diploma - 40 credits
M O
A medical transcriptionist is a medical language specialist who prepares a variety of medical reports and documents for inclusion in patient medical records. Medical transcriptionists must possess a vast knowledge of the medical field and its associated terminology, as well as a high degree of computer and written communication skills. All courses in the program incorporate the skills needed for employment as a medical transcriptionist and are derived from the Association for Healthcare Documentation Integrity Model Curriculum competencies. Graduates of this program will be eligible to write the national exam for registered medical transcriptionists.

<table>
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<th>Course Title</th>
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<td>Beginning Medical Transcription</td>
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<td>ADMM1162</td>
<td>Intermediate Medical Transcription</td>
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Mental Health Behavioral Aide II
Certificate - 16 credits
O
This certificate prepares learners to enter the mental health workplace as a Mental Health Behavioral Aide II (MHBAII). It provides foundational knowledge for entry-level workers (beyond the level of Mental Health Behavioral Aide I) under the supervision of psychiatrists, psychologists, nurses and other mental health professionals to provide direct patient care for children with mental illnesses and perform related functions.

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<td>PSYC210 Introduction to Mental Health Behavioral Aide</td>
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<td>PSYC220 Multicultural America</td>
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<td>PSYC230 Abnormal Psychology</td>
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<td>PSYC240 Lifespan Development</td>
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<td>PSYC258 Behavior and Environmental Management</td>
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</table>

Nursing - (Advanced Standing option)
Associate of Science (AS) - 32 credits
D F M W
The LPN to Associate Degree RN advanced standing option is designed for licensed practical nurses seeking to become registered nurses. This option is offered at the Detroit Lakes, Fergus Falls, Moorhead and Wadena campuses. Accepted students take a two-credit Role Transition course in the semester prior to the start of their program and then join the Geriatric Associate Degree nursing students in the second year of the nursing program. The Associate Degree Nursing Program is designed to prepare students to deliver nursing care in a variety of settings as registered nurses. The graduating nurse will be able to provide nursing care in hospitals, long-term care facilities, clinics, community health and other health-related facilities. Upon completion of the nursing program, an Associate in Science degree is awarded by the college. Nursing graduates may apply to take the National Council Licens ing Exam-RN (NCLEX-RN) following graduation. Individuals entering the program must pass the background check required by the Minnesota Human Services licensing division and depending upon particular clinical partner expectations may also be required to pass an annual national background check. The Minnesota Board of Nursing has officially approved the Associate Degree Nursing program at M State.

Advanced Standing Option-Fall Start
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<td>NURS2437</td>
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<td>Restorative Nursing I</td>
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<td>Nursing Clinical III</td>
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Advanced Standing Option-Spring Start

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<td>SOCI111</td>
<td>Introduction to Sociology</td>
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</table>

Nursing - (Generic Option)

Associate of Science (AS) - 64 credits

D F W

The Associate Degree Nursing program is designed for students with no previous nursing experience seeking to become registered nurses. The Detroit Lakes, Fergus Falls and Wadena campuses offer the two-year generic program. The Associate Degree Nursing Program is designed to prepare students to deliver nursing care in a variety of settings as registered nurses. The graduatinng nurse will be able to provide nursing care in hospitals, long-term care centers, clinics, community health and other health-related facilities. Upon completion of the nursing program, an Associate in Science degree is awarded by the college. Nursing graduates may apply to take the National Council Licensure Exam-RN (NCLEX-RN) following graduation. Individuals entering the program must pass the background check required by the Minnesota State University licensing division and depending upon particular clinical partner expectations may also be required to pass an annual national background check. The Minnesota Board of Nursing has officially approved the Associate Degree Nursing program at M State.

Nursing - (Generic Option) - Associate in Science (AS) on Detroit Lakes campus

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<td>CHEM1100</td>
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<td>Reproductive Disorders</td>
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Pharmacy Technology

Associate of Applied Science (AAS) - 60 credits

The pharmacy technician works as an assistant to a registered pharmacist, assisting or relieving the pharmacist in routine technical and clerical duties and functioning in strict accordance with standard written procedures and guidelines under the supervision of the professional pharmacist. AAS graduates have enhanced potential for upward progression in the career of pharmacy, as the general education component gives the student a well-rounded foundation of knowledge. Students, using their own laptop computers, learn how to access patient profiles, input drug orders and print prescription labels. They learn how to fill prescriptions and aseptic technique for intravenous drug admixture in the college's state-of-the-art teaching lab. The work done by pharmacy technicians allows pharmacists to spend more time with patients on medication management. Individuals entering the program must complete a background check required by the Minnesota Human Services licensing division. Individuals who do not receive a clear background check may participate in the program but may not be allowed to participate in clinical and/or field experience courses.

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<tr>
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<th>Course Title</th>
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<td>PHRM2205</td>
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Pharmacy Technology

Diploma - 36 credits

The pharmacist in routine technical and clerical duties and functioning in strict accordance with standard written procedures and guidelines under the supervision of the professional pharmacist. Students, using their own laptop computers, learn how to access patient profiles, input drug orders and print prescription labels. They learn how to fill prescriptions and aseptic technique for intravenous drug admixture in the college's state-of-the-art teaching lab. The work done by pharmacy technicians allows pharmacists to spend more time with patients on medication management. Individuals entering the program must complete a background check required by the Minnesota Department of Human Services licensing.
division. Individuals who do not receive a clear background check may participate in the program but may not be allowed to participate in clinical and/or field experience courses.

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Phlebotomy Technician

Certificate - 16 credits

The Phlebotomy Technician program provides students the training necessary for employment and advancement in the health care field. Upon satisfactory completion of the classroom training at the college, each student is assigned to an affiliating clinical site for five weeks of daytime phlebotomy clinical experience. During this period, the student performs phlebotomy and other related procedures under the direct supervision of a medical laboratory technician or technologist. Graduates of the one-semester Phlebotomy Technician program are eligible to take the Board of Certification examination of the American Society for Clinical Pathology.

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<td>MLT1110</td>
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<td>Basic Laboratory Techniques</td>
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Practical Nursing

Diploma - 40 credits

The Practical Nursing program prepares the student to practice within the scope of the practical nurse. The student is taught to use the nursing process in the maintenance of health and prevention of illness, the observation and nursing care of individuals experiencing changes in health status and the administration of prescribed medication and treatments. The student will receive supervised learning experiences in caring for individuals in a variety of health care settings such as hospitals, long-term care facilities and physician clinic settings. Practical Nursing graduates may apply to take the National Council Licensure Exam-PN (NCLEX-PN) following graduation. Individuals entering the program must pass the background check required by the Minnesota Human Services licensing division and an annual national background check. The Practical Nursing program is offered on the Detroit Lakes, Fergus Falls, Moorhead and Wadena campuses. The Minnesota Board of Nursing has officially approved the Practical Nursing program at M State.

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Radiologic Technology

Associate of Applied Science (AAS) - 79 credits

D O

The Radiologic Technology program prepares individuals to perform various radiologic procedures. The radiologic technologist instructs and positions patients, manipulates radiographic equipment, adjusts exposure factors, provides radiation protection for patient and self, develops radiographic images, ensures the quality of finished radiographs and carries out activities associated with quality control. The student radiologic technologist carries out these functions under the supervision of a registered radiologic technologist. Graduates of the Radiologic Technology program are eligible for the national certification exam administered by the American Registry of Radiologic Technologists. Successful completion of this exam qualifies the graduate as a Registered Radiologic Technologist. The selection of students into the Radiologic Technology program is done on a point system using the Application Assessment Sheet to rank applicants comparatively based on course grades and GPA.

<table>
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<th>Course Title</th>
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Surgical Technology

Associate of Applied Science (AAS) - 60 credits

M

The Surgical Technology program prepares competent entry-level surgical technologists in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains. Graduates will have the entry-level knowledge to assist the physician, anesthesiologist and registered nurse throughout the perioperative experience while demonstrating proficiency with sterile techniques and the preparation and use of surgical equipment, instruments and supplies, and demonstrating an understanding of anatomy, physiology, pathophysiology and microbiology.

<table>
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<th>Course #</th>
<th>Course Title</th>
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<tbody>
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</table>
Child Care and Education

Certificate - 24 credits

D M

This certificate program includes coursework in child development (birth through age 8), behavior guidance, development of environments and curriculum for young children and relationships with families, as well as on-site experiences in a variety of programs.

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<td>MATH2200</td>
<td>Integrative Play</td>
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<td>MATH2209</td>
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Correctional Officer

Certificate - 25 credits

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Students interested in a criminal justice career other than law enforcement may enroll in the Correctional Officer certificate program. The certificate program is designed to provide pre-employment education for the student who desires a position as a correctional officer. The program also provides continuing education for employed correctional officers. Students who complete the certificate program articulate into the two-year Criminal Justice A.S degree for peace officer licensing.

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<td>CRJU1101</td>
<td>Introduction to Criminal Justice</td>
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<td>CRJU1108</td>
<td>Physical Control Tactics for Corrections</td>
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<td>CRJU1109</td>
<td>Law Enforcement Behavioral Science</td>
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<tr>
<td>SOCC216</td>
<td>Minority Group Relations</td>
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Cosmetology

Diploma - 58 credits

W

Cosmetology is the art, science and business of beauty care and thus offers students a variety of career opportunities. Students completing the program can choose to be general cosmetologists or to excel in an area of expertise such as perming and cutting, hair care and coloring, or skin and nail care. This program welcomes both men and women. Students of the Cosmetology program will receive a combination of classroom and laboratory work with the opportunity to practice their skills on mannequins and actual customers in the campus clinic/salon. Acquired cosmetology hours or credits earned and documented from other licensed colleges, whether in- or out-of-state, may be accepted upon approval of the Minnesota Board of Cosmetologists. Graduates holding a valid cosmetology license are also eligible for employment on tourist ships and in other unique employment settings.

Academically, courses in chemistry, English, math and business are necessary in preparing for a career in cosmetology. The Board of Cosmetologists, which is the cosmetology licensing body, requires 1,550 hours of clinical time in order to become licensed in the State of Minnesota. Upon completion of 1,550 hours and passing of the state exam, a license will be issued. (Note: 33 credits in Salon Practicum is the maximum number of credits which can be applied toward the diploma.)

<table>
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<td>COSM1117</td>
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<td>COSM1119</td>
<td>Haircutting</td>
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<td>COSM1161</td>
<td>Nail Structure and Growth</td>
<td>1</td>
</tr>
<tr>
<td>COSM1163</td>
<td>Hair Color</td>
<td>1</td>
</tr>
<tr>
<td>COSM1171</td>
<td>Principles of Hair Design</td>
<td>1</td>
</tr>
<tr>
<td>COSM1173</td>
<td>Chemistry and Electricity</td>
<td>1</td>
</tr>
<tr>
<td>COSM1177</td>
<td>Infection Control</td>
<td>1</td>
</tr>
<tr>
<td>COSM1179</td>
<td>Minnesota Cosmetology Laws and Rules</td>
<td>1</td>
</tr>
<tr>
<td>COSM2000</td>
<td>Artistry in Hairstyling</td>
<td>1</td>
</tr>
<tr>
<td>COSM2100</td>
<td>Chemical Texture Services</td>
<td>1</td>
</tr>
<tr>
<td>COSM2200</td>
<td>Manicuring/Pedicuring</td>
<td>1</td>
</tr>
<tr>
<td>COSM2300</td>
<td>Anatomy of the Head, Face &amp; Neck</td>
<td>1</td>
</tr>
<tr>
<td>COSM2400</td>
<td>Advanced Nail Techniques</td>
<td>1</td>
</tr>
<tr>
<td>COSM2500</td>
<td>Salon Business</td>
<td>1</td>
</tr>
<tr>
<td>COSM2600</td>
<td>Professional Image</td>
<td>1</td>
</tr>
</tbody>
</table>

Cosmetology (North Dakota)

Certificate - 9 credits

W

This program provides the student with the 250 additional hours and educational requirements needed to satisfy the North Dakota cosmetology licensure guidelines. Students must have completed 1550 hours for licensure in Minnesota or already have a current license and have worked in Minnesota less than 3000 hours.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Crds</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJU1153</td>
<td>North Dakota Laws and Rules</td>
<td>1</td>
</tr>
<tr>
<td>CRJU1200</td>
<td>Salon Practicum</td>
<td>8</td>
</tr>
</tbody>
</table>

Criminal Justice

Associate of Science (AS) - 60 credits

M

The Associate of Science degree in Criminal Justice prepares students for careers in law enforcement. M State’s Criminal Justice program has been designated a Professional Peace Officer Education Program by the Minnesota Board of Peace Officer Standards and Training. Students seeking a career in law enforcement will be prepared for and offered the opportunity to complete all educational and practical requirements necessary to apply for peace officer licensing. The internship program provides students with comprehensive training to develop additional skills in critical thinking, communications and practical application. Criminal Justice faculty have extensive academic and practical experience within the field. Students seeking an AS in Criminal Justice are required to declare that intention prior to the second semester of coursework. Acceptance into the program is contingent on the student’s completion of at least 12 credits of required general education courses. Achievement of a cumulative grade point average of 2.5 or higher. Successful completion of a personality assessment provided and evaluated through M State. [Approximate cost = $140] Completion of a criminal background check through the State of Minnesota or applicable state. [Approximate cost = $15] Achievement of at least a C in all Criminal Justice classes. Completion of a required initial advising session with the program coordinator. Note that expenses listed in brackets above and marked by * are not eligible for financial aid. If there are more applicants who meet the above criteria than the program can accommodate, applicants will be selected based on program application date. Registration to some Criminal Justice courses is restricted to AS degree students unless approved by the program coordinator.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Crds</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM1140</td>
<td>Interpersonal Communication</td>
<td>3</td>
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<tr>
<td>CRJU1101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJU1102</td>
<td>Policing and Practice</td>
<td>3</td>
</tr>
<tr>
<td>CRJU1104</td>
<td>Juvenile Justice and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CRJU1109</td>
<td>Law Enforcement Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>CRJU2201</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CRJU2202</td>
<td>Criminal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CRJU2206</td>
<td>Police Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>CRJU2209</td>
<td>Criminal Investigations</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1101</td>
<td>College Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL1215</td>
<td>Professional and Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

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Minnesota State Community and Technical College

Course Catalog 2017-2018
Early Childhood and Paraprofessional Education

Associate of Science (AS) - 60 credits

D

This program includes coursework in child development for ages birth through 8, behavior guidance, children with special needs, development of environments and curriculum for infant/toddler, preschool- and primary school-age children, and the role of the paraprofessional, as well as on-site experiences in a variety of programs. Graduates will independently provide a healthy, safe and developmentally appropriate learning environment in support of families. Child development courses in combination with general education courses comprise the 60-credit degree program for students. The program meets the educational requirements for assistant teacher and paraprofessional in an educational setting as well as assistant teacher and teacher in a child care setting and/or family child care provider, and group family child care provider (based on program) as listed in Minnesota Department of Human Services Rule Numbers 9502 and 9503. Work experience, in addition to educational coursework, is required by Rule 3 for teacher positions in licensed child care facilities. Individuals with any prior record of child maltreatment or crime of violence will not be allowed to participate in lab or field experience coursework.

Course # | Course Title | Crsds
---|---|---
ART1110 | Introduction to Art | 3
CDEV1105 | Development/Guidance | 3
CDEV1107 | Introduction to Early Education | 3
CDEV2200 | Integrating Play | 3
CDEV2229 | Imaginative Learning | 3
CDEV2236 | Occupational Experience | 3
CDEV2238 | Integrating Children with Special Needs | 3
CDEV2241 | Observing and Assessing | 2
CDEV2242 | Infant/Toddler Program | 3
CDEV2244 | Parent Professional Relations | 3
CDEV2246 | Foundations in Literacy | 3
CDEV2249 | Internship | 3
COMM1120 | Introduction to Public Speaking | 3
ENGL1101 | College Writing | 3
ENGL115 | Professional and Technical Writing | 3
PSCI1200 | General Psychology | 3
SOCI111 | Introduction to Sociology | 3

Esthetist

Certificate - 21 credits

W

Esthetics is the non-medical treatment of the skin, its disorders and its function. Instruction includes the sciences of anatomy, dermatology and chemistry as related to skin care, electricity light therapy; sanitation and safety procedures; Minnesota statutes and laws which pertain to the regulation of the practice of skin care; and elementary service skills. The Board of Cosmetologists, which is the cosmetology licensing body, requires 600 hours of clinical time in order to become licensed in the State of Minnesota. Upon completion of 600 hours and passing of the state exam, a license will be issued.

Course # | Course Title | Crsds
---|---|---
COSM1200 | Salon Practicum | 1-18
COSM120 | Alexandria Body Sugaring | 1
ESTH1808 | | 1
COSM1000 | Principles and Practices | 3
COSM1157 | Histology of the Skin | 1
COSM1159 | Facials, Make-Up, and Hair Removal | 1
COSM1179 | Minnesota Cosmetology Laws and Rules | 1

Massagetherapy

Fire Service Preparation

Certificate - 30 credits

M

This certificate program provides an opportunity for individuals interested in a career in the fire service with the minimum requirements necessary to meet national and Minnesota state qualifications. This program is designed to meet all National Fire Protection Association standards in the following functions: Standard for Firefighter Professional Qualifications, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, Standard for Professional Qualifications for Fire Inspector and Plan Reviewer, Standard for Professional Qualifications for Public Fire and Life Safety Educator, Standard on Operations and Training for Technical Search and Rescue Incidents, and the Standard for Technical Rescue Professional Qualifications. Participants in the Fire Service Preparation program will be actively involved with technical hands-on training to ensure that they are familiar with all entry-level aspects of fire service. Upon completion of the certificate, students will be able to meet the national testing requirements for emergency medical technician, International Fire Service Accreditation Congress and Proboard. Students will also be eligible for the State of Minnesota firefighter license after employment with a career fire department.

Course # | Course Title | Crsds
---|---|---
FIRE1100 | Introduction to Fire Service | 2
FIRE1106 | Firefighter I and II | 3
FIRE1108 | Firefighter I and II Skills | 4
FIRE1130 | Technical Rescue | 3
FIRE1140 | Fire Inspection and Code Enforcement | 3
FIRE1150 | HazMat Operational | 3
FIRE1152 | Building Construction | 3
HLTH2215 | EMT Basic | 6

Manicurist

Certificate - 16 credits

W

The Manicurist program is designed to give students a thorough knowledge of dermatology, the structure, growth and health of the nail, and chemistry as it relates to manicuring, as well as sanitation and safety procedures related to the practice of manicuring. Instruction will cover applied studies and skills in cleaning, conditioning, shaping, reinforcing, coloring and enhancing nails, as well as the application and repair of artificial nails. The Board of Cosmetologists, which is the cosmetology licensing body, requires 350 hours of clinical time in order to become licensed in the State of Minnesota. Upon completion of 350 hours and passing of the state exam, a license will be issued.

Course # | Course Title | Crsds
---|---|---
COSM1000 | Principles and Practices | 3
COSM1161 | Nail Structure and Growth | 1
COSM1179 | Minnesota Cosmetology Laws and Rules | 1
COSM1200 | Salon Practicum | 1
COSM2200 | Manicuring/Pedicuring | 1
COSM2400 | Advanced Nail Techniques | 1

Diploma - 34 credits

W

Massage therapists specialize in professional massage treatments designed to support the health and well-being of clients. Skilled massage also assists clients in recovery from physical ailments and reduces the negative effects of stress. Massage therapy students learn the fundamental techniques needed to perform effective massage treatments, as well as the theory behind delivering professional massage.

Course # | Course Title | Crsds
---|---|---
BIOL2260 | Human Anatomy and Physiology I | 3
BIOL2261 | Human Anatomy and Physiology I Lab | 1
BIOL2262 | Human Anatomy and Physiology II | 3
BIOL2263 | Human Anatomy and Physiology II Lab | 1
HATH1100 | Introduction to Nutrition | 2
THPY1110 | Massage Techniques and Ethics | 3
THPY1111 | Kinesiology | 3
THPY1123 | Integrative Massage | 2
THPY1130 | Advanced Massage | 2
THPY1135 | Deep Tissue Massage | 2
THPY1142 | Practical Skills Clinic | 3
THPY116 | Certification Preparation | 2
THPY1166 | Sports Massage and Hydrotherapy | 2
THPY1150 | Business Development | 2
THPY1156 | Massage Pathophysiology | 3

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101

Minnesota State Community and Technical College
Course Catalog 2017-2018
Paralegal

Associate of Applied Science (AAS) - 60 credits

The Paralegal program provides graduates with a strong legal foundation that prepares them to work under the supervision of an attorney. Students will gain knowledge in the areas of criminal law, civil law, family law, real property law and estate planning. Communication and critical thinking skills combined with real-world application will provide students with the legal knowledge and technical competencies needed for a successful legal career. Students will gain a strong background in legal research and writing using electronic research programs. Graduates of the program find successful careers in legal firms, corporate offices and in nonprofit and government organizations.

Course #  Course Title                        Crs
General Education w/MnTC Goals                            3
SOC .......................................................................................................................... 3
3 credits from the following:
ACCT1012  Principles of Bookkeeping                      3
ACCT2211  Financial Accounting I ................................................. 3
3 credits from the following:
POLS1120  American National Government                     3
POLS1130  State and Local Government                      3
ACCT1120  Business Law ......................................................... 3
COMM1120  Introduction to Public Speaking ...................... 3
ENGL1101  College Writing ..................................................... 3
HRES1122  Human Resource Management                       3
PARA1101  Introduction to Paralegal                        3
PARA1102  Legal Research and Writing I                     3
PARA1104  Civil Law for Paralegals                         3
PARA1105  Criminal Law for Paralegals                      3
PARA1106  Wills, Trusts & Probate........................................ 3
PARA1112  Legal Ethics for the Paralegal                   3
PARA2202  Legal Research and Writing II                    3
PARA2204  Real Property ............................................................. 3
PARA2212  Family Law ................................................................. 3
PARA2216  Paralegal Internship .............................................. 3
PSYC1200  General Psychology .............................................. 3
Course Descriptions

Learn more at minnesota.edu

+ Not offered academic year 2017-2018

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### Course Descriptions

**Course # | CourseTitle | CR | Lec/Lab/OIT | Course # | CourseTitle | CR | Lec/Lab/OIT**
--- | --- | --- | --- | --- | --- | --- | ---
ACCT 1000 | Business Math | 2 | 2/0/0 | ACCT 2215 | Computerized Accounting Applications | 3 | 2/1/0 |
This course covers commonly occurring business-related calculations and their application to accounting and other business functions. | This course is an introduction to computerized accounting applications and software used in the business environment. Topics may include general ledger accounting, payroll procedures, accounts receivable, accounts payable, inventory and depreciation. |
Prerequisite: None | Prerequisite: | |
Corequisite: None | Corequisite: None |
ACCT 1012 | Principles of Bookkeeping | 3 | 2/1/0 | | |
This course covers the basic accounting cycle for service and merchandising businesses. Topics include the analyses of business transactions, recording transactions in a variety of journals, payroll procedures and preparation of financial reports. | |
Prerequisite: None | Corequisite: None |
ACCT 1101 | Payroll | 3 | 2/1/0 | | |
This course covers the various tax laws pertaining to the computation and payment of salaries and wages. Topics include preparation of employment records, payroll registers, time cards, employee earnings records and government payroll reports. | |
Prerequisite: None | Corequisite: None |
ACCT 1108 | Business Math and Calculators | 3 | 2/1/0 | | |
This course covers common business-related calculations, application of these calculations to accounting and other business functions, and use of the touch system on the computer number pad keyboard. | |
Prerequisite: MATH0055 or placement by assessment | Corequisite: None |
ACCT 1120 | Business Law | 3 | 3/0/0 | | |
This course is an introduction to the principles of law as they apply to citizens and businesses. Topics include the court system, legal system, contracts, negotiable instruments, and agency and employer/employee relationships. | |
Prerequisite: None | Corequisite: None |
ACCT 1120 | Spreadsheet Applications | 3 | 2/1/0 | | |
This course covers the use of a computerized spreadsheet system for accounting applications. Topics include document creation, storage and retrieval, editing, printing, creating charts, database applications and file distribution. | |
Corequisite: CPTR1104 | |
ACCT 2201 | Financial Accounting I Lab | 1 | 0/1/0 | | |
This course is the lab course associated with Financial Accounting I (ACCT2211). Students must be enrolled in ACCT2211 to enroll in this course. Major content will be the practical application of concepts introduced in the lecture course. | |
Prerequisite: CPTR1104 | Corequisite: None |
ACCT 2202 | Financial Accounting II Lab | 1 | 0/1/0 | | |
This course is the lab course associated with Financial Accounting II (ACCT2212). Students must be enrolled in ACCT2212 to enroll in this course. Major content will be the practical application of concepts introduced in the lecture course. | |
Prerequisite: ACCT2212 | Corequisite: None |
ACCT 2203 | Managerial Accounting Lab | 1 | 0/1/0 | | |
This course is the lab course associated with Managerial Accounting (ACCT2213). Students must be enrolled in ACCT2213 to enroll in this course. Major content will be the practical application of concepts introduced in the lecture course. | |
Prerequisite: ACCT2212 | Corequisite: None |
ACCT 2210 | Managerial Accounting | 4 | 3/1/0 | | |
This course focuses on strategic decision making related to cost analysis and cost management. | |
Prerequisite: ACCT2212 AND ACCT2211 | Corequisite: None |
ACCT 2211 | Financial Accounting I | 3 | 3/0/0 | | |
This course introduces students to the content and concepts underlying financial statements. Course content includes study of the accounting model, financial statements, merchandise accounting, internal controls and accounting for assets. The course will focus on using accounting information for decision making. | |
Prerequisite: None | Corequisite: None |
ACCT 2212 | Financial Accounting II | 3 | 3/0/0 | | |
This course continues the introduction to the content and concepts underlying basic financial statements. Major content includes income measurement, accrual accounting, accounting theory, time-value of money, accounting for current and long-term liabilities, owner's equity for sole proprietorships, partnerships and corporations, statement of cash flows and financial statement analysis. | |
Prerequisite: None | Corequisite: ACCT2211 |
ACCT 2213 | Managerial Accounting | 3 | 3/0/0 | | |
This course focuses on strategic decision-making related to cost analysis and cost management. | |
Prerequisite: ACCT2212 OR ACCT2211 | Corequisite: None |
ACCT 2215 | Computerized Accounting Applications | 3 | 2/1/0 | | |
This course is an introduction to computerized accounting applications and software used in the business environment. Topics may include general ledger accounting, payroll procedures, accounts receivable, accounts payable, inventory and depreciation. | |
Prerequisite: ACCT2211 AND CPTR1104 OR ACCT1012 AND CPTR1104 OR ACCT1012 AND BUS1120 OR ACCT2211 AND BUS1120 OR ACCT1012 AND CPTR1104 OR ACCT2211 AND CPTR1104 | Corequisite: None |
ACCT 2216 | QuickBooks | 3 | 2/1/0 | | |
This course is an introduction to computerized accounting applications and software used in the business environment. Topics may include general ledger accounting, payroll procedures, accounts receivable, accounts payable, inventory and depreciation. | |
Prerequisite: BUS1120 AND ACCT2211 OR CPTR1104 AND ACCT2211 | Corequisite: None |
ACCT 2217 | Microsoft Dynamics GP | 3 | 2/1/0 | | |
This course covers the use of computerized accounting applications and software used in a mid-sized business environment. | |
Prerequisite: ACCT2211 AND CPTR1104 | Corequisite: None |
ACCT 2255 | Income Tax-Individual | 3 | 2/1/0 | | |
This course provides an explanation and interpretation of the Internal Revenue Code as applied to individual income tax returns. Topics covered include filing requirements, filing status, gross income and exclusions, business income and expenses, tax credits and estimated taxes. | |
Prerequisite: MATH 0055 or placement by assessment | Corequisite: None |
ACCT 2256 | Income Tax-Business | 3 | 2/1/0 | | |
This course provides an explanation and interpretation of the Internal Revenue Code as applied to sole proprietorships, partnerships and corporations. Topics include business income, expenses, business tax credits, withholding and payment of established estate and trust tax issues. | |
Prerequisite: ACCT2255 | Corequisite: None |
ACCT 2291 | Volunteer Income Tax Assistance | 1 | 0/1/0 | | |
This course prepares students for preparation of federal and state income tax returns for individuals. The emphasis is on form preparation with the use of computerized tax preparation software. | |
Prerequisite: ACCT2255 | Corequisite: None |
ACCT 2295 | Certified Bookkeeper Review Course | 3 | 3/0/0 | | |
This course is designed to prepare students to take and pass the National Certified Bookkeeper examination in order to obtain the Certified Bookkeeper designation conferred by the American Institute of Professional Bookkeepers (AIPB). The course will include content adjustments and error correction, payroll and depreciation, inventory and internal controls. | |
Prerequisite: ACCT2211 | Corequisite: None |
ACCT 2620 | Intermediate Accounting I | 4 | 3/1/0 | | |
This course is a comprehensive study of accounting theory and concepts with an analysis of the influence on financial accounting by various boards, associations and governmental agencies. Topics may include the income statement, balance sheet, statement of cash flows, and various asset, liability and equity sections. | |
Prerequisite: ACCT2212 | Corequisite: None |
ACCT 2622 | Intermediate Accounting II | 4 | 3/1/0 | | |
This course is the continuation of a comprehensive study of accounting theory and concepts with an analysis of the influence on financial accounting by various boards, associations and governmental agencies. Topics include the income statement, balance sheet, statement of cash flows, and various asset, liability and equity sections. | |
Prerequisite: ACCT2260 | Corequisite: None |
ACCT 2630 | Fund/Nonprofit Accounting | 3 | 2/1/0 | | |
This course focuses on the fundamentals of fund/nonprofit accounting. It prepares students to apply basic governmental accounting principles and prepare financial statements for fund/nonprofit organizations. | |
Prerequisite: ACCT2212 | Corequisite: None |
ACCT 2640 | Accounting Internship | 1-4 | 1-4 | | |
This course provides students with actual work experience in accounting careers. Student is responsible for obtaining accounting internship. Prerequisite: This internship is for currently enrolled Accounting Majors only and must be approved by instructor. | |
Corequisite: None |
ACCT 2800 | Accreditation Council for Accountancy and Taxation Exam Review | 3 | 2/1/0 | | |
This course is designed to prepare students for the Accreditation Council for Accountancy and Taxation (ACAT) exam. It also serves as a capstone course covering financial accounting, internal control, professional ethics, business consulting services, | |

Course #  CourseTitle  CR  Lec/Lab/O JT  Course #  CourseTitle  CR  Lec/Lab/O JT

COURSE DESCRIPTIONS

managerial accounting, business law and taxation.
Prerequisite:  ACCT1101 AND ACCT1120 AND ACCT2213 AND ACCT2255 AND ACCT2260
Corequisite:  ACCT2622
ADMM 1110 Medical Documentation Fundamentals  4  2/2/0
This course covers the fundamentals of health care documentation and medical record production, legal and ethical issues and responsibilities, text expansion software usage, utilization of medical references, and grammar and punctuation in health care-related communication.
Prerequisite:  None
Corequisite:  None
ADMM 1122 Medical Office Procedures  4  3/1/0
This course offers hands-on training in the tasks performed by medical administrative personnel in medical office settings. Topics include the role of the medical administrative professional, exploration of health care careers, legal and ethical responsibilities, medical appointments and calendars, professional communication including telephone techniques, reception and registration of patients, electronic health record responsibilities, introduction to billing and insurance procedures, and an introduction to medical office management.
Prerequisite:  None
Corequisite:  HLTH1116
ADMM 1140 Medical Language Applications  3  3/0/0
This course provides an in-depth exploration of medical terms used in pharmacology, radiology, laboratory and pathology, surgery, psychiatry, oncology, podiatry and physical and occupational therapy. Spelling, proofreading and analysis of medical documentation will be reviewed along with a study of a variety of medical documents. A solid foundation of medical terminology is cultivated in this course.
Prerequisite:  HLTH1116
Corequisite:  None
ADMM 1150 Medical Billing/Insurance  4  3/1/0
This course provides information related to medical billing and health insurance. Topics covered include billing, statement preparation in the medical office, introduction to medical coding, types of health insurance coverage, insurance claim processes and related ethical and legal issues.
Prerequisite:  None
Corequisite:  HLTH1116
ADMM 1152 Outpatient Coding  4  3/1/0
This course is an introduction to medical coding and emphasizes coding in medical offices and other outpatient care facilities. Course topics include ICD-9 and ICD-10, CPT and HCPCS procedural coding, and legal and ethical issues related to outpatient coding practices.
Prerequisite:  HLTH1116 Medical Terminology OR HLTH1108 Introduction to Anatomy and Physiology
Corequisite:  None
ADMM 1160 Beginning Medical Transcription  3  1/2/0
This course covers the transcription of basic health care dictation, incorporating skills in the English language, technology, medical knowledge, proofreading, editing and research, while meeting progressively demanding accuracy standards.
Prerequisite:  None
Corequisite:  HLTH1116 AND ADMM1110
ADMM 1162 Intermediate Medical Transcription  3  1/2/0
This course is designed to teach the transcription of intermediate original health care dictation using intermediate proofreading, editing and research skills, while meeting progressively demanding accuracy and productivity standards.
Prerequisite:  ADMM1160
Corequisite:  None
ADMM 1200 Medical Office Technology Tools  2  1/1/0
Students will utilize technology that is commonly used in a medical office setting and develop 10-key skills necessary for billing and insurance practices.
Prerequisite:  None
Corequisite:  None
ADMM 2122 Medical Office Management  3  3/0/0
This course examines the many responsibilities of a medical office manager. It covers a medical office manager must be aware of current regulations in the health care industry and how these regulations affect the operations of a health care organization. Office management, business operations, human resources, financial management and marketing for health care organizations are also explored.
Prerequisite:  ADMM1122
Corequisite:  None
ADMM 2130 Medical Office Career Insight  2  2/0/0
This course explores topics in the health care industry as they impact medical administrative professionals. Students will have the opportunity to focus on local, regional or national topics in preparation for a medical office career. Students will learn to appropriately present their acquired skills, knowledge and personal attributes to prospective medical care employers.
Prerequisite:  ADMM1122 OR ADMM1160
Corequisite:  None
ADMM 2150 Medical Coding and Billing Applications  3  2/1/0
This course will teach the principles of Medicare coverage, billing, coding and payment for both inpatient and outpatient services. It will provide students with the knowledge and tools for developing the skills needed to submit accurate claims to Medicare, maintain compliance, prevent potential missed revenue and avoid unnecessary claim and coding denials.
Prerequisite:  None
Corequisite:  ADMM1152
ADMM 2152 Advanced Coding  4  2/2/0
This course is a continuation of ADMM1152 Outpatient Coding. Students will learn to extract coding information from medical records. This course emphasizes correct application of diagnosis and procedure coding guidelines and provides an introduction to computer coding applications.
Prerequisite:  ADMM1152
Corequisite:  None
ADMM 2154 Hospital Billing  2  1/1/0
This course covers billing processes related to the hospital claim form. Billing for inpatient, ambulatory surgery and hospital-based outpatient services is covered.
Prerequisite:  ADMM1150 OR ADMM1152
Corequisite:  None
ADMM 2234 Professional Development  2  2/0/0
This course covers the development of professional work behaviors and communication, analysis of the dynamics of the health care work environment and exploration of professional development and career opportunities relating to medical administrative/ support staff.
Prerequisite:  ADMM1122 Medical Office Procedures or ADMM1152 Medical Billing and Insurance or ADMM1162 Intermediate Medical Transcription
Corequisite:  None
ADMM 2235 RMT Exam Review  1  1/0/0
This course prepares students to take the Registered Medical Transcriptionist (RMT) examination. Review of medical transcription rules and language will be integral components of this course. Practice examinations will be taken under timed conditions. The course will assist the student in determining a plan of study and continued learning in the area of medical language in preparation for the RMT certification examination.
Prerequisite:  ADMM1162 Intermediate Medical Transcription
Corequisite:  None
ADMM 2255 Certified Professional Biller Examination  1  1/0/0
This course prepares students to take the Certified Professional Biller (CPB) examination offered by the American Academy of Professional Coding (AAPC). Practice examinations will be taken under timed conditions. The course assists the student in establishing a personal plan for continued development in preparation for the certification examination.
Prerequisite:  None
Corequisite:  None
ADMM 2258 Certified Professional Coder Examination Review  1  1/0/0
This course prepares students to take the Certified Professional Coder (CPC) examination offered by the American Academy of Professional Coders (AAPC). Review of Current Procedural Terminology (CPT), International Classification of Diseases (ICD) and Healthcare Common Procedure Coding System (HCPCS) Level II coding is an integral part of this course. Practice examinations will be taken under timed conditions. The course assists the student in establishing a personal plan for continued development in preparation for the certification examination. This course also prepares students to take other nationally recognized coding examinations.
Prerequisite:  ADMM1152
Corequisite:  None
ADMM 2260 Certified Professional Coder - Hospital Examination Review  1  1/0/0
This course prepares students to take the Certified Professional Coder - Hospital (CPC-H) examination. Review of CPT, ICD and HCPCS II coding will be an integral part of this course. Practice examinations will be taken under timed conditions. The course assists the student in establishing a personal plan for continued development in preparation for the certification examination.
Prerequisite:  None
Corequisite:  ADMM2252
ADMM 2268 Advanced Medical Transcription  3  1/2/0
This course covers transcription of advanced original health care dictation using advanced proofreading, editing and research skills, while meeting progressively demanding accuracy and productivity standards.
Prerequisite:  ADMM1162
Corequisite:  None
ADMM 2270 Medical Office Simulation  2  1/1/0
This course is a capstone experience for students enrolled in a medical administrative program. Medical office responsibilities such as appointment scheduling, registration, health information management, and billing and financial operations are included in this project-based course. This course should be taken in the last semester prior to graduation as students will employ skills mastered over the course of their program enrollment. Students will develop 10-key skills necessary for billing and insurance practices in a medical facility.
Prerequisite:  ADMM1122
Corequisite:  None
ADMS 2272 Medical Transcription Practicum 3 0/3/0
This course provides an office-simulation setting to give students experience in performing medical transcription on all levels of reports, multiple report types and multiple specialties. The student will apply all previously learned skills in utilizing references and word expansion techniques.
Prerequisite: ADMM1162
Corequisite: None

ADMM 2276 Evaluation and Management Coding Practices 3 2/1/0
This course will teach students to appropriately assign evaluation and management codes based on physician documentation. Students will abstract information from healthcare documentation and assign appropriate levels of service.
Prerequisite: ADMM1152
Corequisite: None

ADMM 2290 Medical Administrative Internship 3 0/0/3
This course provides the student with practical occupational experience in a health care-related facility. Each internship is an individualized experience. Each student prepares a training plan in conjunction with the training site to provide guided experiences related to the skills and knowledge acquired in the medical administrative programs.
Prerequisite: None
Corequisite: None

ADMM 2292 Medical Transcription Internship 3 0/0/3
This course provides the student with practical occupational experience in a health care-related facility. Each internship is an individualized experience. Each student prepares a training plan in conjunction with the training site to provide guided experiences related to the skills and knowledge acquired in the medical transcription field.
Prerequisite: ADMM2268
Corequisite: None

ADMM 2320 Medical Office Capstone 1 0/1/0
This is a capstone experience for students enrolled in a medical administrative program. Medical office responsibilities such as appointment scheduling, registration, health information management, and billing and financial operations are included in this project-based course. It is recommended that students take this course near the end of their program.
Prerequisite: ADMM1122
Corequisite: None

ADMS 0090 Basic Keyboarding 1 0/1/0
This course introduces and develops basic computer keyboarding techniques and skills. Emphasis is on learning the touch-method of keying the alphabetic, numeric, symbol and punctuation keys and using proper keyboarding technique to develop speed and accuracy.
Prerequisite: Placement into keyboarding courses will be by instructor assessment.
Corequisite: None

ADMS 1100 Keyboarding I 3 1/2/0
In this course the alpha, numeric, symbol and punctuation keys are reviewed emphasizing the touch method. Computer keyboarding fundamentals and techniques are taught, including basic formatting, proofreading skills, straight-copy skill development and correct computer keyboarding posture and technique.
Prerequisite: Either ADMS0090 OR Placement by assessment.
Corequisite: None

ADMS 1104 Skillbuilding 1 0/1/0
This course emphasizes improved computer keyboarding speed and accuracy while strengthening basic keyboarding techniques.
Prerequisite: ADMS0090 OR Placement by assessment.
Corequisite: None

ADMS 1110 Word Processing 3 2/1/0
This course introduces students to the word processing techniques needed to facilitate the creating, producing, editing and storing of documents. The course stresses increased proficiency in the computer production of business documents.
Prerequisite: None
Corequisite: None

ADMS 1112 Desktop Publishing 3 1/2/0
This course introduces the concepts, terminology, techniques and applications of desktop publishing and incorporates advanced document processing skills. The student develops skills in critical thinking, decision making and creativity. In addition, the student will reinforce collaborative learning in planning, designing and evaluating business documents.
Prerequisite: None
Corequisite: None

ADMS 1116 Business Communications I 3 2/1/0
This course prepares students for oral, written and non-verbal business communication skills and competencies required within the workplace. Students will apply proper business formats in memos, letters and other business documents using the direct, indirect and persuasive approaches in both formal business and social business style formats. The principles of grammar, punctuation, spelling and word usage will be applied and developed to gain a greater mastery to impart information professionally while matching style and tone in business writing. Other topics may include strategies for internal and external communication situations, audience analysis and communication through technology individually or within teams.
Prerequisite: Placement by assessment into ENGL1101 OR C or higher in one of the following: ENGL0096, ENGL0097, ELL1080, or ENGL0098
Corequisite: None

ADMS 1120 Administrative Office Procedures 3 2/1/0
This course covers the skills and procedures required for the administrative office professional within the automated modern office. Topics may include time management, leading teams, handling conflict resolution, managing projects, planning and scheduling events, and arranging travel. Students will develop skills in office procedures, telephone techniques, evaluating equipment and software purchases, budgeting, managing inventory and processing mail. This course will provide the student with in-depth exposure to the roles and responsibilities of an office professional, both ethically and professionally.
Prerequisite: None
Corequisite: None

ADMS 1128 Records Management 3 2/1/0
This course is an introduction to the procedures and rules for indexing and storing documents in alphanumeric, numeric, geographic, subject and chronological systems. It also includes an introduction to the procedures for managing document and record storage systems. Applications include electronic storage and retrieval using database software for computers.
Prerequisite: None
Corequisite: None

ADMS 1130 Office Software Applications 3 2/1/0
This course is designed to provide the office professional with software application skills in spreadsheets, databases and email as used in the office environment. Spreadsheet topics may include formatting documents, managing workbooks and worksheets, filtering and sorting, and utilizing importing and exporting of data. Databases may also include creating and utilizing tables, queries, forms and reports, and refining sorting and filtering to generate forms and reports. Email topics may include sending, replying and forwarding email, creating contacts, customizing calendar settings, scheduling meetings and appointments, and creating groups and distribution lists.
Prerequisite: None
Corequisite: None

ADMS 1140 Administrative Office Professional Internship I 2 0/0/2
This course provides entry-level office support experience for students in their last semester of the ADMS diploma program. Each internship is individualized, and a training plan is created with each training site, giving students the opportunity to demonstrate their skills in a business setting.
Prerequisite: per instructor’s approval
Corequisite: None

ADMS 1142 Career Internship I 2 0/0/2
This is a career enrichment course designed to give students an in-depth understanding of professional employment expectations and opportunities. This course will emphasize the expectations career professionals face in today’s workplace regarding interpersonal communication, decision making, ethical behavior, policies, professional conduct, project completion, team building, and time and resource management. Students will use course concepts and skills to complete a professional project in their area of career interest.
Prerequisite: None
Corequisite: None

ADMS 1150 Introduction to Windows 1 0/1/0
This course covers basic information about computer hardware and software and the use of the Windows operating environment for application packages.
Prerequisite: None
Corequisite: None

ADMS 1152 Introduction to Word Processing 1 0/1/0
This course covers the introduction and operation of personal computer hardware and the use of a word processing application to perform basic word processing functions.
Prerequisite: None
Corequisite: None

ADMS 1154 Introduction to Spreadsheets 1 0/1/0
This course will provide an introduction to spreadsheets. Students will learn to apply basic formats, formulas and functions to spreadsheets.
Prerequisite: None
Corequisite: None

ADMS 1156 Introduction to Database 1 0/1/0
This course will provide an introduction to databases. Students will plan and create basic databases. Students will create basic queries, forms and reports to disseminate information.
Prerequisite: None
Corequisite: None

ADMS 1158 Introduction to Presentations 1 0/1/0
This course will provide an introduction to presentation software. Students will learn how to create a slide show to present information. Students will learn how to enter text, add and delete slides, format and design themes, and present information in a variety of methods.
Prerequisite: None
Corequisite: None

ADMS 1160 Introduction to the Web 1 0/1/0
This course will provide students with the basic tools and features to use when searching the Web, making online purchases or communicating with others via the Web. Students also will be exposed to copyright laws and citing sources to avoid plagiarism.
Prerequisite: None
Corequisite: None
Prerequisite:
This course introduces the concepts, terminology, techniques and applications of desktop publishing software.
Corequisite:
None

ADMS 1164 Introduction to Outlook 1 0/1/0
This course will provide an overview of the basic tools and features used in Outlook for sending, receiving and forwarding email. Students will learn to attach files, manage calendars, schedule appointments, create tasks and set up groups.
Corequisite:
None

Prerequisite:
None

ADMS 1190 Keyboarding II 1 0/1/0
This course covers advanced formatting and text editing techniques that focus on developing enhanced keyboarding, editing and printing skills. Emphasis is on improving speed and increasing accuracy in the operation of the alpha, numeric, symbol and punctuation keys and in developing text editing concepts, critical thinking and decision-making skills.
Corequisite:
ADMS1100

ADMS 1210 Spreadsheet Essentials 2 1/1/0
This course will provide students who use Excel but have limited experience with and skills in the workplace to improve their skills. Students will learn how to analyze and manage data, enhance charts and use mid-level formulas and functions to enhance their skills to consolidate and present information effectively.
Corequisite:
None

Prerequisite:
None

ADMS 1242 Career Internship II 2 0/0/2
This is the second-level enrichment course designed to provide students with real-life experience in a professional environment by applying academic business principles. The course will emphasize more in-depth projects and tasks within the workplace. Emphasis will be on interpersonal communication, decision making, problem solving, organizing and project management. Students will be required to accept higher-level responsibilities, tasks and projects as assigned per the site supervisor or faculty member.
Corequisite:
ADMS1142

Prerequisite:
None

ADMS 1310 Critical Workplace Skills 3 2/1/0
This course will provide students with transferable skills that can be used in any job or position. Students will develop the soft skills and personal qualities that prepare them to make a positive contribution to the daily operations of an organization. These may include communications, decision making, critical thinking and problem solving skills. Students will also gain technology creatively, effectively and efficiently with integrity. Students will develop the skills that demonstrate commitment to an organization including reliability, dependability, flexibility and being positive and enthusiastic. Students will develop the workplace skills of accepting responsibility, prioritizing, time management, working well under pressure and showing leadership skills with professionalism.
Corequisite:
None

Prerequisite:
None

ADMS 2124 Emerging Office Technologies 3 2/1/0
This course introduces the student to emerging office technologies and tasks that increase work efficiency and productivity in changing office environments. Topics include voice recognition, digital transcription, cloud computing (including secured information), editing PDF files and accessing information through the Internet. This course also provides students with general understanding of computer-based systems in organizations and how information is used to satisfy business needs. The goal of the course is to help students learn how to use and manage information and information systems to revitalize business processes, improve managerial decision making and problem solving, and gain a competitive advantage.
Corequisite:
None

Prerequisite:
None

ADMS 2205 Advanced Word Processing 1 0/1/0
This course provides students with an in-depth understanding of advanced word processing techniques needed to facilitate the production, documentation, and storage of business documents. The course will stress increased proficiency in word processing, spreadsheets, databases, presentations and basic Word page development. Advanced software features and tools will be used to design and create various documents for all applications. This course will improve the office professional's confidence in software applications and Internet searches by cultivating analytical, critical-thinking and problem-solving skills required and experienced in the office setting.
Corequisite:
ADMS1110

Prerequisite:
None

ADMS 2212 Advanced Office Software Applications 3 2/1/0
This course is designed to advance, enhance and reinforce software skills for the office professional with extensive integration of applications using word processing, spreadsheets, databases, presentations and basic Web page development. Advanced software features and tools will be used to design and create various documents for all applications. This course will improve the office professional's confidence in software applications and Internet searches by cultivating analytical, critical-thinking and problem-solving skills required and experienced in the office setting.
Corequisite:
None

Prerequisite:
C or higher in ADMS1130 OR per instructor's approval

ADMS 2216 Business Communications II 3 2/1/0
This course is designed to enhance the office professional's business communication skills by creating more advanced business documents that may include business plans, managerial reports, manuscripts, budgets, presentations and others. Language elements and writing mechanics will be reviewed, with extensive practice in proofreading, editing and revising as students learn to communicate efficiently and effectively. Students will use analytical, decision making and technology skills for collaborative and individually written documents and presentations.
Corequisite:
C or higher in ADMS1116 OR per instructor's approval

ADMS 2240 Administrative Office Professional Internship II 3 0/0/3
This course provides office support experience for students in their last semester of the ADMS AAS program. Each internship is individualized, and a training plan is created within the host training site, providing students the opportunity to demonstrate their skills in a business setting. The internship experience will demonstrate that students will be better-prepared for positions above the entry level through the higher-level skills, roles and responsibilities learned in the AAS degree program, and related to administrative office occupations, and are able to perform at the entry level in a business setting.
Corequisite:
None

ADMS 2250 Administrative Office Professional Simulation 4 2/2/0
This capstone course for the Administrative Assistant AAS program provides students with the opportunity to practice and develop professionalism, efficiency and proficiency in using technology, oral and written communication, human relations, organization, critical thinking skills and workplace preparedness. Students will develop final job search documents and an individualized professional development plan that sets goals.
Corequisite:
None

Prerequisite:
per instructor's approval

ADMT 1173 Microsoft Office Access Certification 1 0/1/0
This course prepares participants to sit for the Microsoft Office Access MCSA (Microsoft Certified Application Specialist) certification. Class outcomes are aligned with certification objectives. Exam objectives are categories of examination tasks identified by subject-matter experts that certify an ability to productively use Microsoft Office programs. These categories are organized into skill sets representing the more basic functions of each Office program.
Corequisite:
None

Prerequisite:
CFTR1104

ADMT 1174 Microsoft Office PowerPoint Certification 1 0/1/0
This course prepares participants to sit for the Microsoft PowerPoint Certification (Microsoft Office certification). Class outcomes are aligned with certification objectives. Exam objectives are categories of examination tasks identified by subject-matter experts that certify an ability to productively use Microsoft Office programs.
Corequisite:
None

Prerequisite:
CFTR1104

ADMT 2110 Topics in Administrative Management Technology 1 0/1/0
The goal of this course is to introduce students to a range of topics in the career field of the administrative professional. Topics will vary each semester and could range from office technology trends to soft skills to employment trends. Course may be repeated for credit with a change in subtitle.
Corequisite:
None

Prerequisite:
Permission of Instructor

ADMT 2222 Event Planning 2 2/0/0
This course explores the principles and practices involved in planning and administering special events and/or events. Students will learn event planning through applied activities, analyzing the process and procedures necessary to plan an event, identifying various resources needed to organize an event and venue selection criteria.
Corequisite:
None

Prerequisite:
None

ADMT 2224 Applied Event Management 1 0/1/0
Students in this course will apply classroom and textbook principles by collaborating with other students and faculty to plan, promote and execute an authentic event on campus, working with area businesses and organizations. This course is a continuation of ADMT2222.
Corequisite:
ADMT2222

Prerequisite:
None

ADMT 2236 Administrative Project Management 3 2/1/0
Project management is a powerful set of tools and practices that provides a systematic approach to planning, organizing, controlling and leading a project to successful completion. This course guides students through a step-by-step process for managing projects from the initial planning stage to final completion and evaluation. Successful implementation of project management processes is dependent on developing interpersonal skills. Therefore, this course also compares and contrasts project management and self-management skills by reviewing the discipline of emotional intelligence.
Corequisite:
None

Prerequisite:
CFTR1104

ADMT 2300 Office Graphics and Presentations 3 2/1/0
This course is designed to provide the student with the design and layout techniques of advanced software applications needed to produce business, presentations and visual publications. Emphasis is on available software tools, presentation options and design, as well as presentation considerations of the target audience. Upon completion, the student should be able to demonstrate the ability to design and produce business presentations and publications.
Corequisite:
None

Prerequisite:
CFTR1104

Prerequisite:
None
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<tbody>
<tr>
<td>ADMT 2600</td>
<td>Trends in Office Technology</td>
<td>3</td>
<td>2/1/0</td>
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<tr>
<td>AMST 1101</td>
<td>Automotive Equipment Fundamentals I</td>
<td>2</td>
<td>1/1/0</td>
</tr>
<tr>
<td>AMST 1102</td>
<td>Alignment and Suspension I</td>
<td>3</td>
<td>1/2/0</td>
</tr>
<tr>
<td>AMST 1103</td>
<td>Starting and Charging</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>AMST 1104</td>
<td>Basic Maintenance Service</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>AMST 1111</td>
<td>Automotive Electronics</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>AMST 1114</td>
<td>Basic Maintenance Service</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>AMST 1116</td>
<td>General Automotive Service</td>
<td>5</td>
<td>3/2/0</td>
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This course will provide the introduction to basic vehicle maintenance. Included will be identification of service points and procedures required for maintenance. Fluid type, brake inspection, tire rotation and service information will be addressed.

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<tbody>
<tr>
<td>AMST 1112</td>
<td>Engines I</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>AMST 1116</td>
<td>Brakes II</td>
<td>3</td>
<td>2/1/0</td>
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</table>

This course covers the fundamentals of internal combustion engine operation, repair and maintenance. The procedures for removal, replacement, diagnosing, rebuilding and assembly are presented. Proper tool and equipment application and failure diagnosis are emphasized.

Prerequisite: None
Corequisite: None

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<tbody>
<tr>
<td>AMST 1126</td>
<td>Engines II</td>
<td>3</td>
<td>1/2/0</td>
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</table>

This course covers the disassembly, diagnosis, measurement, service, assembly and adjustment of engines and components. Cylinder heads, valve trains, cylinder block assemblies, cooling and lubrication systems are thoroughly covered.

Prerequisite: None
Corequisite: None

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<tr>
<td>AMST 1132</td>
<td>Drive Trains I</td>
<td>3</td>
<td>2/1/0</td>
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</table>

This course covers service and theory of operation with clutch, manual transmission, drive shaft and drive axle systems. Service will involve removal, disassembly, repair, reassembly and adjustment of the mentioned items. Diagnostics and repair of noise vibration and harshness in the drive train system will also be performed.

Prerequisite: None
Corequisite: None

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<tr>
<td>AMST 1136</td>
<td>Drive Trains II</td>
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<td>1/2/0</td>
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</table>

This course covers drive axles, drive shafts, front and rear wheel bearings and analysis of vehicle noise vibration and harshness. Theory, service skills and diagnosis are covered on bench and in-vehicle units. Drive line phasing, alignment and balance are covered.

Prerequisite: None
Corequisite: None

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<tbody>
<tr>
<td>AGRI 1400</td>
<td>Farm Marketing and Management</td>
<td>3</td>
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This course is an introduction to concepts, strategies and technology for farm planning, economic accounting systems and marketing techniques.

Prerequisite: None
Corequisite: None

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<tr>
<td>CPTR 1101</td>
<td>Introduction to Programming</td>
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This course is designed to address current trends in the administrative professional industry, with emphasis on the use of office technology. Topics will vary but could include trends in electronic mail, multimedia interaction, presentation hardware and software, and Internet technologies and applications relevant to the business world. Upon completion, the student should be able to demonstrate an awareness of current technological applications for the modern office.

Prerequisite: CPTR1104
Corequisite: None

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<tr>
<td>CPTR 1102</td>
<td>Introduction to Programming II</td>
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</table>

This course provides students with actual work experience in an administrative professional internship. A training plan is created for each student in conjunction with the training site to provide experience related to the skills and knowledge acquired in the program. Each internship is an individualized experience. Therefore, this course offers a flexible, variable credit experience. The student may choose from 1, 2 or 3 credits, depending on the number of hours pre-arranged with the internship site supervisor. Each credit will require 45 hours of on-the-job learning.

Prerequisite: Instructor Approval
Corequisite: None

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<tr>
<td>CPTR 1104</td>
<td>Introduction to Programming III</td>
<td>3</td>
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This course focuses on the various types of suspension systems currently in use. Systems covered include McPherson strut, leaf spring, coil spring and torsion bar. Also covered will be caster, camber and toe, and other alignment angles; wheel balance using the latest road force technology; and operation, diagnosis and repair of manual and power steering systems.

Prerequisite: None
Corequisite: None

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<tr>
<td>CPTR 1105</td>
<td>Introduction to Programming IV</td>
<td>3</td>
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</table>

This course focuses on the many electronic control systems used on today's vehicles. Sensor inputs, management operation and operational commands are addressed. Components that assist in the management of engine fuel, ignition and emission systems are thoroughly covered.

Prerequisite: None
Corequisite: TRNS1102

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<tr>
<td>CPTR 1106</td>
<td>Introduction to Programming V</td>
<td>3</td>
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This course covers the operation of the ignition system. Student will learn how various ignition systems work so they will have the understanding to diagnose and repair ignition problems.

Prerequisite: None
Corequisite: None

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<tr>
<td>CPTR 1107</td>
<td>Introduction to Programming VI</td>
<td>3</td>
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This course covers the operation of the ignition system. Student will learn how various ignition systems work so they will have the understanding to diagnose and repair ignition problems.

Prerequisite: None
Corequisite: None

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<tr>
<td>CPTR 1108</td>
<td>Introduction to Programming VII</td>
<td>3</td>
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This course covers the operation of the ignition system. Student will learn how various ignition systems work so they will have the understanding to diagnose and repair ignition problems.

Prerequisite: None
Corequisite: None

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<tr>
<td>CPTR 1109</td>
<td>Introduction to Programming VIII</td>
<td>3</td>
<td>2/1/0</td>
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This course covers the operation of the ignition system. Student will learn how various ignition systems work so they will have the understanding to diagnose and repair ignition problems.

Prerequisite: None
Corequisite: None

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<td>CPTR 1110</td>
<td>Introduction to Programming IX</td>
<td>3</td>
<td>2/1/0</td>
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This course covers the operation of the ignition system. Student will learn how various ignition systems work so they will have the understanding to diagnose and repair ignition problems.

Prerequisite: None
Corequisite: None

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<tr>
<td>CPTR 1111</td>
<td>Introduction to Programming X</td>
<td>3</td>
<td>2/1/0</td>
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This course covers the operation of the ignition system. Student will learn how various ignition systems work so they will have the understanding to diagnose and repair ignition problems.

Prerequisite: None
Corequisite: None

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<td>CPTR 1112</td>
<td>Introduction to Programming XI</td>
<td>3</td>
<td>2/1/0</td>
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This course covers the operation of the ignition system. Student will learn how various ignition systems work so they will have the understanding to diagnose and repair ignition problems.

Prerequisite: None
Corequisite: None

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<tr>
<td>CPTR 1113</td>
<td>Introduction to Programming XII</td>
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This course covers the operation of the ignition system. Student will learn how various ignition systems work so they will have the understanding to diagnose and repair ignition problems.

Prerequisite: None
Corequisite: None
## Course Descriptions

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<tbody>
<tr>
<td>ARCH 2232</td>
<td>Civil and Structural Integration</td>
<td>3</td>
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<tr>
<td>ARCH 2236</td>
<td>Architectural Presentation</td>
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<td>0/2/0</td>
</tr>
<tr>
<td>ARCH 2242</td>
<td>Mechanical and Electrical Integration</td>
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<td>1/2/0</td>
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<tr>
<td>ARCH 2244</td>
<td>Commercial Projects</td>
<td>4</td>
<td>1/3/0</td>
</tr>
<tr>
<td>ART 1107</td>
<td>Foundations of Art, 2-D</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>ART 1110</td>
<td>Introduction to Art</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>ART 1111</td>
<td>Drawing I</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>ART 1112</td>
<td>Painting I</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>ART 1117</td>
<td>Printmaking I</td>
<td>3</td>
<td>2/1/0</td>
</tr>
</tbody>
</table>

### Corequisite:
- ARCH 2230
- ARCH 2240
- ARCH 2244
- ARCH 2250
- ARCH 2256
- ART 1107
- ART 1110
- ART 1111
- ART 1112
- ART 1117

### Prerequisite:
- ARCH 2233
- ARCH 2237
- ARCH 2240
- AMST 2292
- ANTH 1100
- ART 1122
- ART 1126
- ART 2218
- ART 2220
- ART 2226
- ARCH 2233
- ARCH 2237
- ARCH 2240
- AMST 2292
- ANTH 1100
- ART 1122
- ART 1126
- ART 2218
- ART 2220
- ART 2226
- ARCH 2233
- ARCH 2237
- ARCH 2240
- AMST 2292
- ANTH 1100
- ART 1122
- ART 1126
- ART 2218
- ART 2220
- ART 2226

### Meets MnTC Goal Areas
- Area 5
- Area 8
- Area 6F

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of these systems. Students will perform scan tool diagnostics, circuit analysis, circuit repair and bleeding procedures involving anti-lock brake systems. The student will perform on-operations with brake part replacement, machining of drums and rotors, and hydraulics.

**Prerequisite:** None

**Corequisite:** None

**AMST 2233** Automatic Transmission I
- **Credit:** 3
- **Lec:** 2/1/0
- This course involves the principles of the many systems combined into an automatic transmission. The student will understand planetary gear, clutch operation, band application and one-way clutching as it pertains to power flow through the transmission. The student will disassemble and make necessary adjustments and repairs on a variety of transmissions. The student will perform transmission fluid and filter changes where applicable.

**Prerequisite:** AMST1111 and TRNS1102

**Corequisite:** None

**AMST 2237** Automatic Transmissions II
- **Credit:** 3
- **Lec:** 1/2/0
- This course reviews the examination of mechanical, plumbing and electrical systems in both residential and commercial buildings. Content includes analysis of plumbing and heating, ventilation and air conditioning (HVAC) systems, and power and lighting systems.

**Prerequisite:** AMST2233

**Corequisite:** None

**AMST 2240** Heating Ventilation and Air Conditioning
- **Credit:** 3
- **Lec:** 1/2/0
- This course teaches the principles of heating, air conditioning and ventilation systems. Types and designs, component variations, diagnosis, testing and repair are studied and practiced on functioning units. System performance, recovery, evacuation, recharging and aftercooling are also covered.

**Prerequisite:** None

**Corequisite:** TRNS1102

**AMST 2292** Internship
- **Credit:** 1
- **Lec:** 0/0/1
- This course is designed by the student and advisor in cooperation with industry to provide an on-the-job training experience for the student. The student will participate in an internship plan consistent with 45 hours of internship time. The plan should reflect the internship site, student knowledge, prior coursework and skills. This course will provide the student with an opportunity to integrate the skills, knowledge and concepts gained in previous coursework into an occupational experience.

**Prerequisite:** TRNS1102

**Corequisite:** None

**ANTH 1100** Introduction to Anthropology
- **Credit:** 3
- **Lec:** 3/0/0
- This course is a survey of human nature through time and around the world. It examines the physical nature of our species, archaeology, the study of cultural behavior and linguistic studies.

**Prerequisite:** None

**Corequisite:** None

**ART 1122** Computer Aided Drafting for Architecture
- **Credit:** 4
- **Lec:** 2/2/0
- This course covers the development of three-dimensional architectural modeling and documentation using AutoCAD for Architecture software. Emphasis is on creating and editing custom component styles.

**Prerequisite:** CAD01102 and ENGT1134

**Corequisite:** None

**ART 1126** Residential Project I
- **Credit:** 3
- **Lec:** 1/2/0
- This course covers the design development and documentation of single-family living. Students will be introduced to residential design styles as well as proper documentation methods.

**Prerequisite:** ENGT1126 and ENGT1134

**Corequisite:** None

**ART 2218** Architectural Internship
- **Credit:** 3
- **Lec:** 0/0/3
- This course provides the student with an occupational experience in the architectural technology field. Each internship is an individualized experience.

**Prerequisite:** ARCH1126

**Corequisite:** None

**ART 2220** Specification Writing for Construction
- **Credit:** 3
- **Lec:** 1/2/0
- This course covers the implementation and inclusion of specifications, construction materials and finishes into a set of construction documents.

**Prerequisite:** None

**Corequisite:** None

**ART 2226** Residential Project II
- **Credit:** 4
- **Lec:** 1/3/0
- This course introduces building design and construction requirements for multi-family housing. The course covers the processes for the selection of building materials and their integration into construction documents.

**Prerequisite:** ARCH1122 and ARCH1126

**Corequisite:** None

**ART 2230** Mechanical and Electrical Integration
- **Credit:** 2
- **Lec:** 1/1/0
- This course reviews the examination of mechanical, plumbing and electrical systems in buildings. Content includes analysis of plumbing and heating, ventilation and air conditioning (HVAC) systems, and power and lighting systems.

**Prerequisite:** ARCH1122 and ARCH1126

**Corequisite:** None

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<td>ART 1121</td>
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<td>ART 1122</td>
<td>World of Art II</td>
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<td>ART 1123</td>
<td>Global Art History: Asian, Islamic, African, Mesoamerican</td>
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<td>ART 1124</td>
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<td>ART 2114</td>
<td>Photographic Art I</td>
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<td>ART 2116</td>
<td>Mixed Media I</td>
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</table>

**Note:**
- **Course #** and **CourseTitle** are as listed in the table.
- **CR** (Credit) indicates the number of credits for each course.
- **Lec/Lab/O JT** refers to the lecture, laboratory, and/or other joint time components.
- **Prerequisite:** and **Corequisite:** details are provided for each course.

This document contains course descriptions from Minnesota State Community and Technical College's Course Catalog 2017-2018.
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<tr>
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<td>BIOL 1115</td>
<td>Introduction to Biotechnology</td>
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<td>BIOL 1122</td>
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<td>BIOL 1123</td>
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<td>BIOL 1161</td>
<td>Introduction to Freshwater Biology</td>
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<tr>
<td>BIOL 1170</td>
<td>Essentials of Human Anatomy and Physiology</td>
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<tr>
<td>BIOL 1171</td>
<td>General Ecology</td>
<td>4</td>
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</table>

**Prerequisite:**

- ASL1115 AND Grade of B or better in ASL1115
- Grade of B or better in ASL1115 AND Grade of B or better in IPP2113
- Meets MnTC Goal Areas 2, 3 and 10.
- Meets MnTC Goal Areas 2, 3 and 10.
- Meets MnTC Goal Areas 2 and 3.
- Meets MnTC Goal Areas 2 and 3.
- Meets MnTC Goal Area 3.
- Meets MnTC Goal Area 3.
- Meets MnTC Goal Area 3.
- Meets MnTC Goal Area 3.

**Corequisite:**

- None
- None
- None
- None
- None
- None
- None
- None

**Course Description:***

- This course introduces sign language vocabulary for basic medical settings and exposes interpreters to a variety of human body systems.
- This course introduces advanced vocabulary, communicative functions and language techniques.
- This course introduces linguistic fields, communication systems, syntax, phonology and grammar.
- This course explores issues related to human anatomy and physiology, including diseases and infections.
- This course addresses the use of public policy and food technology to reduce or control risks in our food supply. An overview of microbiological, chemical and environmental risks will be presented, as well as government and industry controls used to ensure food safety.
- This course introduces two-semester sequence of general biology that can be taken in any order.
- This course introduces the field of medical interpreting. Students will learn to facilitate communication between patients who use American Sign Language (ASL) and their physicians, nurses, lab technicians and other health care providers.
- This course introduces linguistic structure and form of biotechnology and genetic engineering. Laboratory simulations and other lab-like experiences provide opportunities for students to perform techniques common in the field, gather and analyze experimental data and troubleshoot procedures.

**Corequisite:**

- None
- None
- None
- None
- None
- None
- None
- None
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<td>BIOL 2202 Principles of Nutrition</td>
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<tr>
<td>BIOL 2240 Genetics</td>
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<tr>
<td>BIOL 2260 Human Anatomy and Physiology I</td>
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<tr>
<td>BIOL 2262 Human Anatomy and Physiology II</td>
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<tr>
<td>BIOL 2265 Diagnostic Microbiology</td>
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<tr>
<td>BIOL 2267 Medical Microbiology</td>
<td>3</td>
<td>3/0/0</td>
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</tbody>
</table>

**Course Descriptions:**

- **BIOL 2202 Principles of Nutrition**: This course is a study of the fundamental principles of nutrition. This course will cover food composition, diet planning, utilization of food nutrients in the body and the requirements for nutrients in infancy, childhood, teen years, adults, and the elderly. Also included are discussions about current trends in nutrition, the relationship of diet and disease, and cultural differences in dietary practices. Using the basic principles of nutrition, students will have a lab-like experience tracking, measuring, calculating and analyzing their diet and presenting the results in a written analytical report.
- **BIOL 2240 Genetics**: This course is the study of the basic principles of genetics, biochemistry, medical genetics, and ecology of human diseases caused by microorganisms. It is open to all students but is recommended for students majoring in biology and health-related areas. This course includes a laboratory which explores molecular and genetic techniques.
- **BIOL 2260 Human Anatomy and Physiology I**: This course is a comprehensive introductory overview of human anatomy and physiology that includes basic fundamental concepts of cell biology, tissues and organs making up the integumentary, skeletal, muscular and nervous systems. It is the first of a two-semester sequence in which anatomy and physiology are studied with an emphasis on structure and functions of systems. This course contains a lab-like component.
- **BIOL 2262 Human Anatomy and Physiology II**: This course is a continuation of Anatomy and Physiology I. Topics will include the study of cells, tissues and organs making up the endocrine, cardiovascular, respiratory, digestive, urinary and reproductive systems. Emphasis is on the structure and function of included systems. This course contains a lab-like component.
- **BIOL 2265 Diagnostic Microbiology**: This course discusses microorganisms of medical importance in relationship to disease and diagnosis. Emphasis is placed on the identification of common pathogens, bacteria, fungi, yeast and parasites, specimen collection and introduction to virology and immunology. Laboratory covers basic techniques including species identification, identification of normal flora and pathogens, morphological classification and characteristics, biochemical testing, microbial control, microbiology of water and soil, and identification of unknown cultures.
- **BIOL 2267 Medical Microbiology**: This course is the study of the structure and the classification of bacteria, viruses, parasites and fungi of medical importance. It emphasizes the transmission of disease agents, signs and symptoms, immunology, immunization, control of microbial growth, specimen collection/transport, methods of identification and antimicrobial resistance. This lecture course includes lab-like components.

**Corequisites and Prerequisites:**

- **BIOL 2202 Principles of Nutrition**: Corequisite: None
- **BIOL 2240 Genetics**: Corequisite: None
- **BIOL 2260 Human Anatomy and Physiology I**: Corequisite: BIOL1122
- **BIOL 2262 Human Anatomy and Physiology II**: Corequisite: BIOL2260
- **BIOL 2265 Diagnostic Microbiology**: Corequisite: BIOL1122
- **BIOL 2267 Medical Microbiology**: Corequisite: None
- **BIOL 2268 Medical Microbiology Lab**: Corequisite: None
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<tbody>
<tr>
<td>BUS 2206</td>
<td>Principles of Marketing</td>
<td>3</td>
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</tbody>
</table>

This course examines the business function of marketing and will enhance students’ decision-making skills in a global market. The course focuses on how marketers create value by satisfying customer needs and wants by analyzing which target markets the organization can best serve, and the appropriate strategies to serve these markets. This course also will discuss the implications of the environmental factors that can impact the marketing strategies of a business. Topics include business and consumer markets, branding and product strategies, marketing research, pricing, promotion and supply chain management.

**Prerequisite:** None

**Corequisite:** None

| BUS 2220 | Global Business | 3 | 3/0/0 |

This course will introduce the student to business operations surrounding global trade and identify interconnected issues. Businesses are increasingly challenged by multinational corporations, international trade policies, cultural and religious differences, environmental movements and human rights groups, which often play a leading role in defining and framing the global agenda. Understanding why nations do business with each other, how communication plays a vital role, what cultural features influence business practices, how competitive dynamics affect organizations and what legal considerations must be followed will prepare students for a rapidly-changing global economy.

**Prerequisite:** None

**Corequisite:** None

| BUS 2275 | Money and Banking | 3 | 3/0/0 |

This course is an in-depth study of the role and function of money, the Federal Reserve System and the United States banking system. Specific subjects to be covered will include monetary standards, financial instruments, monetary theory, capital and money markets, rationale for interest rates, fiscal and monetary policy, inflation, sources and uses of credit, and the role of financial institutions.

**Prerequisite:** None

**Corequisite:** None

| CADD 1000 | AutoCAD Basics | 3 | 2/1/0 |

This course provides the fundamentals of computer-aided drafting (CAD) using the latest version of the AutoCAD drafting software. The course develops the CAD skills necessary to design and print complex two-dimensional drawings and sheet sets.

**Prerequisite:** None

**Corequisite:** None

| CADD 1100 | Solid Modeling with AutoCAD | 2 | 1/1/0 |

This course will cover the solid modeling tools and functions in AutoCAD. Students will learn to create and manipulate primitive solids, extrusions, sweeps and lofts. They will learn to utilize the Boolean functions, solid editing commands and developed viewing tools required to generate complex solid models and create industry-standard drawings based on the designed geometry.

**Prerequisite:** CADD1000

**Corequisite:** None

| CADD 1102 | Fundamentals of CADD | 4 | 2/1/0 |

This course provides the fundamentals of computer-aided drafting using the latest version of AutoCAD drafting software. The course develops the fundamental CADD skills necessary to produce and print complex drawings and sheet sets.

**Prerequisite:** None

**Corequisite:** None

| CADD 1114 | Introduction to Solids and Parametric Modeling | 4 | 2/2/0 |

This course is an introduction to solid modeling and model derived drawing layouts using the latest version of the Autocad Inventor and SolidWorks drafting software.

**Prerequisite:** CADD1102 AND MCD1102

**Corequisite:** None

| CADD 1200 | Introduction to SolidWorks | 2 | 1/1/0 |

This course will introduce students to the part modeling and drawing layout tools in SolidWorks software. Students will learn the concepts of parametric sketching and modeling, feature creation and editing, and model derived bidirectionally associative drawing layouts.

**Prerequisite:** None

**Corequisite:** None

| CADD 1210 | Introduction to Autodesk Inventor | 2 | 1/1/0 |

This course will introduce students to the part modeling and drawing layout tools in Autodesk Inventor software. Students will learn the concepts of parametric sketching and modeling, feature creation and editing, and model derived bidirectionally associative drawing layouts.

**Prerequisite:** None

**Corequisite:** None

| CADD 2214 | Advanced Solids and Parametric Modeling | 4 | 2/2/0 |

This course covers advanced part modeling, assembly modeling, sheet metal and presentation files in the latest versions of the Inventor and Solidworks drafting software.

**Prerequisite:** CADD1114

**Corequisite:** None

| CARP 1108 | Interior Finish I | 4 | 1/3/0 |

This course focuses on materials used for interior finishing, plus hands-on experience in the application of these materials.

**Prerequisite:** CARP1104

**Corequisite:** None

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### COURSE DESCRIPTIONS

Field. Two of the topics covered are group dynamics and looking like a professional.

**Prerequisite:** None

**Corequisite:** None

| BUS 1146 | Personal Finance | 3 | 3/0/0 |

This course is an introduction to personal financial management and planning. Topics covered in this course include key factors that affect personal income, budgeting, cash-flow management, use of credit and credit cards, planned borrowing, managing taxes and personal investments, including housing, automobiles, insurance and investments.

**Prerequisite:** None

**Corequisite:** None

| BUS 1158 | Free Market Enterprise | 2 | 2/0/0 |

Students in Free Enterprise (SIFE) is an internationally recognized organization designed to educate students about how to ethically engage in the free enterprise system to serve the economic interests of individuals and communities. Through this course, students will develop and execute various free enterprise projects and present their results at a regional competition.

**Prerequisite:** Approval from SIFE Advisor

**Corequisite:** None

| BUS 1170 | Introduction to Agriculture, Food Systems and Global Agriculture | 3 | 3/0/0 |

This course is an introduction to the economic environment of the agribusiness sectors of our economy. The course examines the role agriculture plays in the U.S. and global economies. Concepts to be examined include but are not limited to management of agribusiness, marketing of agribusiness, finance of agribusiness and government involvement in agriculture and agribusiness.

**Prerequisite:** None

**Corequisite:** None

| BUS 1174 | Principles of Banking | 3 | 3/0/0 |

This course is an overview of bank operations that will include organizational structure, regulatory environment, profit generation and growth strategies. Banking activities including retail, commercial, investment and international banking products and services are introduced.

**Prerequisite:** None

**Corequisite:** None

| BUS 1175 | Fundamentals of Investing | 3 | 3/0/0 |

This course is an introduction to the world of investments including various types of investment vehicles, techniques and strategies. Study includes the investment environment, role and scope of investments, measuring risk and return, and types of investment markets and transactions. Traditional short- and long-term investment instruments such as common and preferred stocks, bonds, government issues, convertible investments and mutual funds are analyzed. Higher-risk and more complex investments such as options, futures, real estate, precious metals and artwork are reviewed. Tax implications of the various investments are studied. Lastly, portfolio management is analyzed, including techniques and strategies.

**Prerequisite:** None

**Corequisite:** None

| BUS 1300 | Financial Statement Analysis | 3 | 3/0/0 |

This course covers principles used in analyzing financial statements and budgets. Students learn how to prepare, read and analyze financial statements. Topics include analysis of income statements, balance sheets, flow of funds, risk, obtaining and spreading statements, cash flow projections, capital accounts and financial ratios.

**Prerequisite:** None

**Corequisite:** None

| BUS 2150 | Legal Environment of Business | 3 | 3/0/0 |

This course offers an overview of the American legal system and provides a introduction to what a business person should know about the law and the American legal system. Major content areas include the court system, trial process, alternative dispute resolution, business and the Constitution, the administrative process, torts and product liability, common law of contracts, employment law, employment discrimination, anti-trust law, international business and ethics.

**Prerequisite:** None

**Corequisite:** None

| BUS 2202 | Management Information Systems | 3 | 3/0/0 |

The course is a survey course of management information systems. An information system is a set of interrelated components working together to collect, retrieve, process, store and disseminate information for purposes of facilitating, planning and decision making in business and other organizations. The student will gain invaluable knowledge as to how a business solves problems using an information system.

**Prerequisite:** None

**Corequisite:** None

| BUS 2204 | Principles of Management | 3 | 3/0/0 |

This course examines the historical and philosophical foundations of management as well as current theory and practices. Managerial decisions as a planner, organizer, motivator, controller and leader of a diverse workforce in a competitive environment are identified and evaluated. The course is a study of the basic principles of management including the functional, scientific, behavioral and systems approaches. Current literature, concepts, models and applications may be included as well as the use of case studies.

**Prerequisite:** None

**Corequisite:** None

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<td>CDEV 1107</td>
<td>Introduction to Early Education</td>
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<td>CDEV 2200</td>
<td>Integrating Play</td>
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<td>CDEV 2229</td>
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<td>Integrating Children with Special Needs</td>
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<td>Parent Professional Relations</td>
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<tr>
<td>CDEV 2290</td>
<td>Internship</td>
<td>3</td>
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**Course Descriptions**

1. **Development/Guidance**: This course provides an overview of childhood development from conception through age 6, with emphasis in the following areas: physical, cognitive, language, creative, and social emotional. It integrates theory with developmentally appropriate practice in home, center-based, and school settings. In addition, this course gives the student an introduction to positive child-caregiving techniques for infant/toddler and preschool groups. This course will help students to understand behavior problems and identify strategies to prevent and resolve problem behaviors. 
   **Prerequisite:** None 
   **Corequisite:** None

2. **Introduction to Early Education**: This course explores career opportunities with children and investigates a variety of child development programs for children ages birth through 8. Students will examine job requirements, duties, regulations and personal characteristics of successful workers. In addition, this course will guide the student in obtaining skills needed to maintain a safe and healthy child development setting. 
   **Prerequisite:** None 
   **Corequisite:** None

3. **Integrating Play**: This course examines play during the infant, toddler, preschool and primary school years of development. This course will examine theories of play, discover how play promotes development, examine the physical environment and its relation to play, and construct play materials appropriate to the play of children. Play is the work of children. 
   **Prerequisite:** None

4. **Imaginative Learning**: This course provides an exploration of the home, center or school environment for children birth through 8. It includes an examination of both indoor and outdoor space in relation to arrangement, maintenance and evaluation. Students apply their knowledge in an actual work setting. The focus is on designing learning environments and developmentally appropriate practice in methods and materials for art, literacy, music, math, science, physical development, and social and multicultural studies. 
   **Prerequisite:** CDEV1102 AND CDEV1107
   **Corequisite:** None

5. **Occupational Experience**: This course provides an opportunity to apply knowledge and skill in an actual child development setting. Students will demonstrate competence in promoting health, safety and nutrition; guiding children; arranging learning environments; and communicating with parents. 
   **Prerequisite:** None
   **Corequisite:** None

6. **Integrating Children with Special Needs**: This course examines the development of and provides hands-on experiences for children with special needs in an integrated child care or primary school-age setting. Students integrate knowledge of developmental needs, developmentally appropriate environments and effective teaching methods. 
   **Prerequisite:** CDEV2229
   **Corequisite:** None

7. **Observing and Assessing**: This course provides the student with an opportunity to observe and assess children’s development. Under the supervision of an instructor, the student observes, records, interprets and develops plans to strengthen the development of infants through primary school-age children. Students will construct a child study based on assessments gathered throughout the course of the semester for one specific child. 
   **Prerequisite:** CDEV 2200 and CDEV 2229
   **Corequisite:** None

8. **Infant/Toddler Program**: This course provides an overview of infant/toddler learning experiences in either home or center-based settings. Students integrate knowledge of developmental needs, developmentally appropriate environments, and effective caregiving and teaching methods. 
   **Prerequisite:** CDEV1105 AND CDEV1107 AND CDEV2200 AND CDEV2229
   **Corequisite:** None

9. **Parent Professional Relations**: This course covers the relationship between the caregiver and the child’s family. The students will explore strategies to maintain professional relationships with co-workers, parents and outside organizations. Cultural diversity/dynamics, bias, public education, housing, employment, crime, health care, legal services and social services will be explored. 
   **Prerequisite:** None
   **Corequisite:** None

10. **Foundations in Literacy**: This course is an overview of early language acquisition, how literacy is best developed and what activities child care providers can do to promote the foundation for literacy development. 
    **Prerequisite:** CDEV1105 AND CDEV1107 AND CDEV2200 AND CDEV2229
    **Corequisite:** None

11. **Internship**: This course provides an opportunity to apply knowledge and skill in an actual child development setting. Students implement a variety of learning experiences that are developmentally appropriate and culturally sensitive for a specific group of children. 
    **Prerequisite:** None 
    **Corequisite:** None

12. **Essential Chemistry Skills**: This course covers basic chemistry concepts and elementary mathematical and problem-solving skills necessary for success in college chemistry. It is strongly encouraged for students who are apprehensive about taking chemistry and are enrolled in CHEM1100 or CHEM1111. Concurrent enrollment with CHEM1100 or CHEM1111 is recommended. 
    **Prerequisite:** MATH0095
    **Corequisite:** None

13. **Lab Calculations/Procedures**: This course prepares students to apply mathematics (percents, metric system, molar mass, equivalent mass, molarity, normality, ratios, etc.) to formulas used in chemistry, historical, and the medical laboratory courses. The course emphasizes practical application of lab equations used to calculate quantities required to prepare chemical solutions/agents. An introduction to the basic laboratory measuring equipment will also be included. This course is intended for anyone taking a chemistry course. 
    **Prerequisite:** None
    **Corequisite:** None

14. **Fundamental Concepts of Chemistry**: This course deals with substances, their structures and properties, the changes they undergo and the laws that govern those changes. Intended for prospective elementary teachers, non-science majors and those who need background for General Chemistry. This course includes a lab. 
    **Prerequisite:** MATH0095 or placement by assessment
    **Corequisite:** None

15. **Principles of General Chemistry**: This course will provide the student with a basic understanding of the general principles of inorganic chemistry and includes the topics of atomic structure, stoichiometry, solutions, bonding, thermodynamics and properties of solids, liquids and gases. The laboratory component introduces techniques, methods and instrumentation. 
    **Prerequisite:** Math 0095 or placement by assessment
    **Corequisite:** None

16. **Medical Chemistry**: This is an introductory course for Medical Laboratory Technician students covering the analytical principles, techniques and correlation of results in the science of body chemistry. Other topics included in the course are instrumentation, calculations, preparations of reagents, quality assurance and quality control, specimen collection, transportation, analysis and result reporting. 
    **Prerequisite:** CHEM1100 OR CHEM1111
    **Corequisite:** None

17. **General Inorganic Chemistry I**: This course is the first of a two-course series (CHEM111 and CHEM112). Students will learn the general chemistry principles: atomic structure, stoichiometry, solutions, bonding, thermodynamics, electron structure, periodic properties of the elements, intermolecular forces and properties of solids, liquids and gases. This course includes a lab. 
    **Prerequisite:** MATH1020 OR Instructor permission for students who do not score high enough on the placement exam for placement into Chem1112 but wish to enroll in Chem1111. Students with this permission must co-register for CHEM 0095. 
    **Corequisite:** None

18. **General Inorganic Chemistry II**: This course is the second course of a two-course series (CHEM111 and CHEM112). Students will learn the general chemistry principles: solution chemistry, kinetics, chemical equilibrium, acid-base chemistry, solubility and precipitation, heat of reactions, analysis, calorimetry, coordination chemistry, nuclear chemistry and introductory environmental chemistry. The course includes a lab. 
    **Prerequisite:** CHEM1111
    **Corequisite:** None

19. **Introduction to Organic and Biochemistry**: This course consists of both lab and lecture sessions. Students will learn the fundamental concepts in organic and biochemistry: properties, classification and nomenclature of hydrocarbons and compounds containing various functional groups; basic organic reaction mechanisms; and structure and metabolism of carbohydrates, lipids, proteins and nucleic acids. 
    **Prerequisite:** CHEM1100
    **Corequisite:** None

20. **Organic Chemistry I**: This course is the first course of a two-course series (CHEM2224 and CHEM2225). Students will learn organic chemistry principles including introduction to the classification, structure, reactions and reaction mechanisms of carbon compounds. The following topics will be included: structures and properties of organic compounds, methane and the alkanes, stereochemistry, substitution and elimination reactions, electrophilic and free radical addition, alkenes, alkanes, and various functional groups, conjugation and resonance, benzene and the aromatics.
CHEM 2225 Organic Chemistry II
Meet Meets MnTC Goals 2 and 3. This course is the second course of a two-course series (CHEM 2222 and CHEM 2225). Students will learn the reactions and characteristics of various organic chemistry groups. The following topics will be included: aldehydes and ketones, carboxylic acids, amines, amides, phenols, carbamids, esters, aromatics, heterocyclic compounds, macromolecules, and the possible addition of selected topics such as carbohydrates, fats, amino acids and proteins. The course includes a lab which will include purification, synthesis, and characterization of organic compounds and the study of organic reactions. Green chemistry techniques will be practiced whenever possible.
Prerequisite: CHEM 2222
Corequisite: None

CHEM 2970 Internship Experience
None This course is designed to provide students with a meaningful work experience related to their field of interest. This experience will increase their employability and enhance their life skills. Completion of this course requires a written report and an evaluation from the student's supervisor. Each internship is an individual experience, therefore this course is offered with variable credits. The student may choose from 1, 2, or 3 credits as prearranged with the internship site supervisor and corresponding faculty. Each credit will require a minimum of 45 hours of on-the-job learning. This course will be graded pass/fail only.
Prerequisite: Instructor approval
Corequisite: None

CIVL 1100 Introduction to Civil Engineering Technology
This course provides an overview of the fields of civil engineering technology. It includes a historical background, present practices and future challenges of the civil engineering profession. Topics discussed include ethics, professional responsibility, written and oral communications, concepts of analysis, design, interpretation of results and decision making.
Prerequisite: None
Corequisite: None

CIVL 1101 Survey I: Fundamentals of Surveying
The student will learn the principles of vertical distance measurement, as well as construction staking and the compiling of field notes typical of the civil engineering field. This course will focus on the use of various surveying equipment and procedures including an introduction to global positioning system (GPS) concepts and methods.
Prerequisite: None
Corequisite: None

CIVL 1102 Survey II: Fundamentals
The student will learn the principles of vertical distance measurement, as well as construction staking and the compiling of field notes typical of the civil engineering field. This course will focus on the use of various surveying equipment and procedures.
Prerequisite: None
Corequisite: None

CIVL 1119 Survey II: Land Surveys
Students will learn civil engineering technology land surveying principles including topographic surveys, utilities, drainage and roadway alignment. This course emphasizes the use of Total Station and Global Positioning Systems (GPS) for collecting data as well as civil engineering software for processing data. Additionally, students will utilize GPS functionality on the Trimble TSC3 data collector and Trimble Business Center software.
Prerequisite: CIVL 1100
Corequisite: None

CIVL 1138 CADD II: Plan Layout
This course introduces students to industry-specific civil design software. Students will learn concepts relating to civil engineering drawings including topography, site planning, mapping and downloading survey data to create digital terrain models.
Prerequisite: CADD I
Corequisite: None

CIVL 2209 Construction Inspection
This course involves the study and performance of procedures necessary in the inspection and documentation of general construction of public works projects. Topics include inspector responsibilities, project management, aggregate base, concrete and bituminous inspection.
Prerequisite: CIVL 1102 or CIVL 1110
Corequisite: None

CIVL 2210 Road Design
The student will complete drawings and computations typical of those used in the design of roadways. These may include line location maps, topographic drawings, cross sections, plan and profile earthwork computations.
Prerequisite: CIVL 1119 and CIVL 1138
Corequisite: None

CIVL 2230 Civil Engineering Technology Internship
This civil engineering technology internship provides the student with an opportunity to apply skills and knowledge acquired in prior courses in the occupational setting. Students will develop a plan for the internship with the cooperation of the employer and the instructor.
Prerequisite: CIVL 1138
Corequisite: None

CIVL 2232 Survey III: Legal Surveys
The student will apply history, principles, rules and laws pertaining to land surveying. The student will research land survey records, identify property boundaries, reconstruct land surveys and draft legal descriptions. Students will also participate in boundary survey projects.
Prerequisite: CIVL 1119
Corequisite: None

CIVL 2234 Utility Design
This course introduces students to industry-specific utility design software. Students will learn how to design single family residences, single and multi-story office buildings, and multi-use commercial buildings.
Prerequisite: CIVL 1138
Corequisite: None

CIVL 2238 CADD III: Project Design
This course will focus on the application of civil design computer-aided drafting software for the completion of a project, where students apply principles of civil engineering design.
Prerequisite: CIVL 1138
Corequisite: None

CIVL 2240 Introduction to Geographic Information Systems
This course is an introduction to different types of geographic information systems (GIS) and their capabilities, with the main focus on ESRI ArcMAP software. Topics will include GIS data collection and input, GIS data types and basic mapping concepts.
Prerequisite: None
Corequisite: None

CIVL 2242 Survey II: Global Positioning System
This course covers the instruction and application of Global Positioning System (GPS) technology and GPS equipment for surveying. Students will learn surveying principles, equipment and software used in GPS to meet current-day technological practices.
Prerequisite: CIVL 1119
Corequisite: None

CIVL 2244 Survey IV: Equipment Software
This course covers the application of TDS Survey Pro software as it applies to the TDS Ranger and Recon total stations data collectors. Students will learn these various software routines to make them more efficient with their day-to-day surveying.
Prerequisite: CIVL 1102
Corequisite: None

CIVL 2246 Introduction to Hydrology
This course will include an introduction to hydraulic principles, hydrology, pipe and open channel flow, watershed analysis and storm water regulations.
Prerequisite: CIVL 2234 and CIVL 2240
Corequisite: None

COMM 1100 Communication and Effective Human Relations
This course is designed to provide individuals with basic communication principles for positive relationships in career settings. This is accomplished through oral, written and intra/interpersonal communication skills which are valued for life and work experiences. Changes in the life/work environment are characterized by greater cultural diversity, the performance of more work by more people, and the need for greater ability to cope effectively with life/work issues and problems that require extensive knowledge of human relationships.
Prerequisite: ENGLO096 OR ENGLO040 AND ENGLO050 OR By Assessment
Corequisite: None

COMM 1120 Introduction to Public Speaking
This course clarifies the process of oral communication and makes the student the active participant in the application of these principles while both speaking and listening.
Prerequisite: Assessment into ENGL 1101
Corequisite: None

COMM 1130 Small Group Communication
This course focuses on communication issues in small groups and the importance of small group work in business today. An emphasis will be placed on improving communication skills for successful teamwork, group cohesiveness and the responsibility to group goals and tasks. Students will be provided with opportunities to build their group communication skills through practice.
Prerequisite: Assessment into ENGL 1101
Corequisite: None
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONM 1140</td>
<td>Interpersonal Communication</td>
<td>3</td>
<td>3/0/0</td>
</tr>
<tr>
<td>Meets MnTC Goal Area 1. This course will focus on improving students’ abilities to communicate effectively in one-to-one, dyadic encounters by providing experience-based instruction. Extensive in-class and out-of-class analyses allow the student to examine his/her own and others’ informal social interactions. The long-term goal is for the student to apply interpersonal communication theories to daily life and to draw his/her own conclusions about the effectiveness of interpersonal communication.</td>
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<tr>
<td>Prerequisite:</td>
<td>Assessment into ENGL 1101</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>COM 2220</td>
<td>Oral Interpretation</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>Meets MnTC Goal Area 6. This course is intended to introduce students to the principles and techniques of selecting and analyzing appropriate literary selections and the interpretation of literature through vocal and nonverbal delivery.</td>
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<tr>
<td>Prerequisite:</td>
<td>SPCH1114</td>
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<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 2230</td>
<td>Intercultural Communication</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>Meets MnTC Goal Area 2. This course explores the nature of communication within and between cultures and co-cultures. This class will challenge students to think about their own cultural assumptions and explore ways in which these assumptions differ from those held by people in other cultures. Students will review theories of communication and culture and will examine how culture is evident in languages, behaviors, rituals, norms and worldviews. Students will observe and describe their own cultural background and will learn to respectfully communicate with members of other cultures.</td>
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<tr>
<td>Prerequisite:</td>
<td>Assessment into ENGL 1101</td>
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<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>COM 2240</td>
<td>Family Communication</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>Meets MnTC Goal Area 2. This course provides an introduction to communication functions in various families. The course will include theoretical and practical applications of family communication in our everyday lives, with an emphasis on how effective communication may enhance family relationships and how destructive communication may harm family relationships.</td>
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<tr>
<td>Prerequisite:</td>
<td>Assessment into ENGL 1101</td>
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<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>COM 2250</td>
<td>Gender Communication</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>Meets MnTC Goal Area 7. This course examines communication as it relates to our gendered lives. The course explores how societal views on gender are formed, maintained and transformed through various communication patterns and practices. Practical and theoretical knowledge of gendered communication and its influences on personal and professional relationships will be incorporated and analyzed.</td>
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<tr>
<td>Prerequisite:</td>
<td>Assessment into ENGL 1101</td>
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<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>COM 2260</td>
<td>Computer-Mediated Communication</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>Meets MnTC Goal Area 1. This course is designed to analyze the relational and social dynamics of computer-based communication in a global society. Using a variety of contemporary technologies, students will identify strategies to communicate messages to diverse audiences for multiple purposes, thus learning to use mediated communication more effectively.</td>
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<tr>
<td>Prerequisite:</td>
<td>Assessment into ENGL 1101</td>
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<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 1101</td>
<td>Construction Documents and Codes</td>
<td>3</td>
<td>2/1/0</td>
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<tr>
<td>This course provides an introduction to understanding construction drawings, specifications, processes and building codes.</td>
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<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>COM 1102</td>
<td>Site/Building Layout</td>
<td>2</td>
<td>1/1/0</td>
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<tr>
<td>This course provides the student with the basic knowledge and hands-on skills necessary to lay out a building site and establish elevations for construction.</td>
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<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 1104</td>
<td>Construction Management Principles</td>
<td>2</td>
<td>2/0/0</td>
</tr>
<tr>
<td>This course provides an overview of the construction management industry and introduces the students to the duties and responsibilities of the construction professional. The emphasis of this course will be on the importance of the industry, the industry’s impact and responsibilities to society, and career opportunities for successful students.</td>
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<td>Prerequisite:</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 1108</td>
<td>Principles of Estimating</td>
<td>4</td>
<td>2/2/0</td>
</tr>
<tr>
<td>This course focuses on the basics of material, labor and equipment estimating. Students will learn to calculate the quantities of material comprising a project. These quantities will determine the primary portion of the direct costs used in a construction bid. This process will be the first step in completing accurate bids for construction projects of all sizes.</td>
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<tr>
<td>Prerequisite:</td>
<td>CONM1101</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 1124</td>
<td>Building Systems</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>This course is a comprehensive treatment of the various techniques, systems and methodologies utilized in the construction industry and will help the student prepare for the responsibilities of supervision on a modern construction project.</td>
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<td>Prerequisite:</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 2204</td>
<td>Materials Testing</td>
<td>3</td>
<td>1/2/0</td>
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<tr>
<td>This course covers inspection techniques, methods of material measurement, documentation, material sampling and testing methods for soils and concrete.</td>
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<td>Prerequisite:</td>
<td>None</td>
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<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 2206</td>
<td>Building Codes</td>
<td>2</td>
<td>2/0/0</td>
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<tr>
<td>This course is designed to introduce the Uniform Building Code to students in the construction field, where a basic knowledge of the code’s requirements is needed. Emphasis will be placed on the development and proper use of the code.</td>
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<td>Prerequisite:</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 2208</td>
<td>Construction Bidding</td>
<td>2</td>
<td>1/1/0</td>
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<tr>
<td>This course will explore standard construction contract documents and project estimating procedures and their use in building a competitive bid.</td>
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<td>Prerequisite:</td>
<td>CONM1108</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 2210</td>
<td>Construction Scheduling</td>
<td>3</td>
<td>2/1/0</td>
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<tr>
<td>Planning and scheduling are important management tools. In this course students will learn how to schedule tasks commonly used in the construction industry to bring projects to timely and economically successful completion.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>CONM2217</td>
<td></td>
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<tr>
<td>CONM 2212</td>
<td>Site Management</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>This course covers construction site management from the standpoint of best utilization of site, facilities and services in a safe and efficient manner to complete construction projects.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>CONM 2213</td>
<td>Safety Management</td>
<td>2</td>
<td>2/0/0</td>
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<td>This course includes construction management applications in the areas of safety and health. Students will have an opportunity to earn OSHA 30-hour authorization for successful course completion.</td>
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<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
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<tr>
<td>CONM 2217</td>
<td>Computer Estimating and Bidding</td>
<td>3</td>
<td>2/1/0</td>
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<tr>
<td>This course is designed to utilize computer estimating software such as spreadsheets, databases and industry-leading software to produce competitive, timely and complete construction bids.</td>
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<tr>
<td>Prerequisite:</td>
<td>CONM1108 AND CONM1124</td>
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<tr>
<td>Corequisite:</td>
<td>CONM2210</td>
<td></td>
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<tr>
<td>CONM 2222</td>
<td>Construction Management Internship</td>
<td>2</td>
<td>0/0/2</td>
</tr>
<tr>
<td>This course will provide construction management students with an opportunity to apply and extend their knowledge, practice their skills, integrate behaviors and explore areas of employment within the construction industry. Students will perform activities consistent with program outcomes in an industry setting with the supervision of the site employer.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>COSM 1000</td>
<td>Principles and Practices</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>This course is intended for manicurists, estheticians and some transfer students. In a condensed form, this course will include the topics of chemistry, electricity, salon business, professional image, anatomy and infection control.</td>
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<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>COSM 1001</td>
<td>Introduction to Cosmetology</td>
<td>3</td>
<td>0/3/0</td>
</tr>
<tr>
<td>In this course students will learn some of the basic techniques pertaining to hair, skin and nails and set a portion of the required hours toward the State Board of Cosmetology. The course content will provide a brief overview of all the cosmetology topics that are required by the State Board of Cosmetology for licensure. Upon completion of this course, students attending one year will earn 90 hours toward their cosmetology license. Students who elect to take the course a second time will earn 180 hours toward their cosmetology license.</td>
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</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COSM 1117</td>
<td>Shampooing and Rinsing</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>This course covers shampooing and draining. Students will learn the importance of selecting the correct shampoo for various hair types.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
<td></td>
<td></td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COSM 1119</td>
<td>Haircutting</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>This course will help students develop a strong foundation in haircutting. Students will learn basic sectioning and cutting techniques, along with correct use of scissors, razors and clippers to achieve a strong foundation in haircutting.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COSM 1129</td>
<td>Hairstyling</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>This course will instruct students in conducting services in a safe environment. Students</td>
<td></td>
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</tr>
</tbody>
</table>
**Course Catalog 2017-2018**

**COURSE DESCRIPTIONS**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSM 1130</td>
<td>Properties of the Hair and Scalp</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1153</td>
<td>North Dakota Laws and Rules</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1157</td>
<td>Histology of the Skin</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1159</td>
<td>Facials, Make-Up, and Hair Removal</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1161</td>
<td>Nail Structure and Growth</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1163</td>
<td>Hair Color</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1171</td>
<td>Principles of Hair Design</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1173</td>
<td>Chemistry and Electricity</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1177</td>
<td>Infection Control</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>COSM 1179</td>
<td>Minnesota Cosmetology Laws and Rules</td>
<td>1</td>
<td>1/0/0</td>
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<tr>
<td>COSM 1200</td>
<td>Salon Practicum</td>
<td>1–18</td>
<td>None</td>
</tr>
<tr>
<td>COSM 2000</td>
<td>Artistry in Hairstyling</td>
<td>1</td>
<td>1/0/0</td>
</tr>
</tbody>
</table>

**Course # | Course Title | CR | Lec/Lab/OJT**

<p>| COSM 2100 | Chemical Texture Services | 1 | 1/0/0 |
| COSM 2200 | Manicuring/Pedicuring | 1 | 1/0/0 |
| COSM 2300 | Anatomy of the Head, Face &amp; Neck | 1 | 1/0/0 |
| COSM 2400 | Advanced Nail Techniques | 1 | 1/0/0 |
| COSM 2600 | Professional Image | 1 | 1/0/0 |
| COSM 2700 | Nail Art | 1 | 0/1/0 |
| CPTR 1001 | Introduction To Programming and Scripting | 3 | 1/2/0 |
| CPTR 1100 | Fundamental Computer Concepts | 1 | 0/1/0 |
| CPTR 1102 | Introduction to Macintosh | 3 | 2/1/0 |
| CPTR 1104 | Introduction to Computer Technology | 3 | 2/1/0 |
| CPTR 1106 | Microcomputer Databases | 3 | 2/1/0 |</p>
<table>
<thead>
<tr>
<th>Course #</th>
<th>CourseTitle</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPTR 1108</td>
<td>CISCO I</td>
<td>3</td>
<td>1/2/0</td>
</tr>
<tr>
<td>CPTR 1110</td>
<td>Visual Basic Program I</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 1112</td>
<td>Visual Basic Program II</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 1115</td>
<td>COBOL Programming</td>
<td>4</td>
<td>3/1/0</td>
</tr>
<tr>
<td>CPTR 1118</td>
<td>COBOL II</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 1122</td>
<td>Microcomputer Maintenance</td>
<td>3</td>
<td>1/2/0</td>
</tr>
<tr>
<td>CPTR 1125</td>
<td>IT Essentials I</td>
<td>3</td>
<td>1/2/0</td>
</tr>
<tr>
<td>CPTR 1129</td>
<td>RPG Programming</td>
<td>4</td>
<td>2/2/0</td>
</tr>
<tr>
<td>CPTR 1130</td>
<td>IT Essentials II</td>
<td>3</td>
<td>1/2/0</td>
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<tr>
<td>CPTR 1135</td>
<td>Beginning Networking</td>
<td>2</td>
<td>1/2/0</td>
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<tr>
<td>CPTR 1138</td>
<td>Information Systems</td>
<td>2</td>
<td>2/1/0</td>
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<td>CPTR 1142</td>
<td>Network Essentials</td>
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<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 1148</td>
<td>Microcomputer Operating System</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 1166</td>
<td>Word Processing and Spreadsheets</td>
<td>4</td>
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<tr>
<td>CPTR 1170</td>
<td>Web Engineering I</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 1178</td>
<td>Robotics</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2000</td>
<td>Mobile Application Development</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2210</td>
<td>Database Report Generation</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2220</td>
<td>COBOL Programming II</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2222</td>
<td>Linux I</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2228</td>
<td>RPG/OS400 II</td>
<td>4</td>
<td>2/2/0</td>
</tr>
</tbody>
</table>

Prerequisite:
The student will learn the basics of operating the AS400 and begin writing RPG programs. These programs will include building physical files, writing RPG code, compiling, error finding and producing reports. There will be a special emphasis on developing logic to program more intermediate RPG programs. A high concentration will be on the structure of the student’s calculation specifications. Students will learn how to add, delete and update data to physical files through their RPG programs. Students also will be developing screen programs where users can enter data.

Corequisite:

This course deals with Linux installation, configuration and system administration. This course lays the groundwork for continued study of Linux.

Prerequisite:

This course covers WAN configuration and remote access configuration. Students will practice design and configuration of systems to solve WAN and remote access problems.

Corequisite:

This course is an introduction to programming and maintaining professional Web pages for the business environment. Topics will include page design, authoring tools, accessibility issues and Web page and website development. Focus will be given to client-side programming languages such as HTML and JavaScript, Web server software, Web server maintenance and Internet protocols.

Prerequisite:

This course is designed for students seeking entry-level computer hardware and software skills. Target students include those who want to prepare for careers in information and communication technology (ICT) and students who want to gain skills and working knowledge of how computers work, how to assemble computers and how to troubleshoot hardware and software issues.

Corequisite:

This course teaches basic robot building, programming and troubleshooting. The robot building includes working with multiple motors and sensors on a robot. The robot program includes working with a graphical and command line programming environment. Along with reading current literature about robotics, this class provides the student the fundamentals of robotics.

Prerequisite:

This course teaches basic robot building, programming and troubleshooting. The robot building includes working with multiple motors and sensors on a robot. The robot program includes working with a graphical and command line programming environment. Along with reading current literature about robotics, this class provides the student the fundamentals of robotics.

Prerequisite:

This course is an introduction to networking. This course covers a network model, basic networking math, basic network devices and an introduction to network design.

Prerequisite:

This course covers an introduction to the Visual Basic programming language. It covers language basics and program structure. Topics include graphical interface design and development, control properties, event-driven procedures, variables, scope, expressions, operators, functions, decision-making structures, looping structures and database access.

Prerequisite:

This course covers additional OSI layer topics, network routing and auditing. Students learn and practice accepted troubleshooting procedures.

Prerequisite:

This course covers WAN configuration and remote access configuration. Topics include database compatibility, system structure, memory, input devices, video displays, disk drives, modems and printers.

Prerequisite:

This course teaches software development for popular mobile operating systems. Focus is on the creation of platform-specific user interfaces, data storage and network use.

Prerequisite:

This course is a study of ethernet problems and solutions. The course covers ethernet segmentation options and VLAN configuration. The student will practice solving these problems.

Prerequisite:

This course teaches basic robot building, programming and troubleshooting. The robot building includes working with multiple motors and sensors on a robot. The robot program includes working with a graphical and command line programming environment. Along with reading current literature about robotics, this class provides the student the fundamentals of robotics.

Prerequisite:

This course teaches basic robot building, programming and troubleshooting. The robot building includes working with multiple motors and sensors on a robot. The robot program includes working with a graphical and command line programming environment. Along with reading current literature about robotics, this class provides the student the fundamentals of robotics.

Prerequisite:

This course covers an overview of the COBOL programming language. Students will gain a solid foundation in the fundamentals of COBOL coding including knowledge of COBOL syntax, program structure, program design, execution and debugging. Maintenance and modification of typical business applications will also be coded throughout the course.

Prerequisite:

This course is designed for students seeking entry-level computer hardware and software skills. Target students include those who want to prepare for careers in information and communication technology (ICT) and students who want to gain skills and working knowledge of how computers work, how to assemble computers and how to troubleshoot hardware and software issues.

Prerequisite:

This course covers an introduction to the Visual Basic programming language. It covers language basics and program structure. Topics include graphical interface design and development, control properties, event-driven procedures, variables, scope, expressions, operators, functions, decision-making structures, looping structures and database access.

Prerequisite:

This course covers an introduction to the Visual Basic programming language. It covers language basics and program structure. Topics include graphical interface design and development, control properties, event-driven procedures, variables, scope, expressions, operators, functions, decision-making structures, looping structures and database access.

Prerequisite:
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<thead>
<tr>
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<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPTR 2230</td>
<td>Structured Query Language</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2231</td>
<td>Linux II</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2233</td>
<td>Network Security</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2238</td>
<td>Database Integration</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2240</td>
<td>Database Administration</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2242</td>
<td>Java Programming</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2244</td>
<td>Enterprise Network Technologies</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2250</td>
<td>IT Supervised Occupational Experience</td>
<td>3</td>
<td>0/0/3</td>
</tr>
<tr>
<td>CPTR 2252</td>
<td>Microcomputer Systems Project</td>
<td>3</td>
<td>1/2/0</td>
</tr>
<tr>
<td>CPTR 2260</td>
<td>Advanced Structured Query Language</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2262</td>
<td>Internet Protocol Version 6</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CPTR 2272</td>
<td>Network Operating Systems</td>
<td>3</td>
<td>2/1/0</td>
</tr>
</tbody>
</table>

**COURSE DESCRIPTIONS**

**CPTR 2230 Structured Query Language**
This course covers the basics of SQL (Structured Query Language) programming. SQL is a popular computer language that is used by small and large business organizations and computer programmers. The primary purpose of SQL is in working with databases and relational database management systems to store, retrieve, edit, manipulate and format data for end users and decision makers.
Prerequisite: CPTR1106
Corequisite: None

**CPTR 2234 Linux II**
The primary focus of this course is Linux networking, security, ethics and privacy.
Prerequisite: CPTR2224
Corequisite: None

**CPTR 2236 Network Security**
This course deals with the understanding of basic network security. Students learn how to manage systems to guard against various security threats.
Prerequisite: CPTR1148 AND CPTR2272
Corequisite: None

**CPTR 2238 Database Integration**
This course covers the integration of data from multiple databases with strategies for development of integrated database applications. In working with these databases the student will store, organize and analyze data. Students will be responsible for setting up new databases and maintaining existing databases.
Prerequisite: CPTR2230 AND CPTR2242
Corequisite: None

**CPTR 2240 Database Administration**
Students in this course will identify core database concepts and create database models. Installation, configuration and maintenance of a database management system (DBMS) will be covered. Students will analyze and administer a database's performance optimization. Additional topics will include user administration within the database backup and restoration, and database normalization.
Prerequisite: CPTR2260 AND CPTR2272
Corequisite: None

**CPTR 2242 Java Programming**
In this course the student utilizes the Java programming language to create both Internet appslet and applications.
Prerequisite: None
Corequisite: None

**CPTR 2244 Enterprise Network Technologies**
This course will introduce information technologies used in an enterprise network environment. Possible technologies the course will cover are SANs, virtualization, clustering, enterprise wireless, VPN connectivity, structured cabling and network management. The course will discuss how these technologies provide 24/7 availability and introduce the concept of green technologies.
Prerequisite: CPTR2272
Corequisite: None

**CPTR 2250 IT Supervised Occupational Experience**
This course is designed to provide students with an opportunity to explore career paths in the information technology field while gaining practical work experience. Emphasis will be placed on the individual student's skills. This experiential learning allows the student to gain insight into one or more careers through job shadowing, service learning, volunteering, externships, work experience or a combination of these options. This class will provide career exploration information as well as work experience to help students identify their career goals and personal interests.
Prerequisite: Instructor Approval
Corequisite: None

**CPTR 2252 Microcomputer Systems Project**
Students utilize learning in previous courses to design and implement solutions to a business need. Activities include learning about current business practices and preparation for employment.
Prerequisite: CPTR2272
Corequisite: None

**CPTR 2260 Advanced Structured Query Language**
Students will build upon the skills learned in the Structured Query Language (SQL) class. This course takes as a basis the concepts and common operations such as joins and sub-queries, unions and intersections. Additional topics will include the use of stored procedures and views and appropriate use of these features, proper indexing of data, altering table definitions and use of the CASE statement.
Prerequisite: CPTR2230
Corequisite: None

**CPTR 2262 Internet Protocol Version 6**
This course teaches the management of systems using Internet Protocol Version 6. The emphasis is protocol management on networking devices.
Prerequisite: CPTR1108
Corequisite: None

**CPTR 2272 Network Operating Systems**
This course teaches functions of a network operating system so the student can effectively manage and operate a network. The student learns how to establish and oversee the operations of a network, create logins, design and establish directory structures and implement security.
Prerequisite: CPTR1148 OR CPTR1138 OR CPTR1125 OR CPTR2224
Corequisite: None

**CPTR 2277 Data Analytics**
This course is an Introduction to data analytics. The student will explore historical roots and reasons for business intelligence. The student will be introduced to big data, data mining and data warehousing and how they help businesses. Database scalability and optimization also will be covered.
Prerequisite: CPTR1106 AND MATH1123
Corequisite: None

**CPTR 2282 E-mail Administration**
This course provides students with the skill sets to design, install, troubleshoot, secure and perform daily administration for a directory services integrated email system. Students learn how to use cryptographic authentication techniques along with learning how to analyze email server system performance and support email client packages.
Prerequisite: CPTR2272
Corequisite: None

**CPTR 2294 Internship**
This course provides students with the opportunity to apply knowledge and skill sets learned in concurrent coursework. Students will perform activities in an employer-supervised industry setting that is consistent with program outcomes. Students also will utilize interpersonal communication skills within the context of applying knowledge and skill sets.
Prerequisite: Instructor Approval
Corequisite: None

**CPTR 2296 Topics in Computers**
The goal of this course is to introduce students to a computer topic chosen from a wide range of classic and state-of-the-art research, techniques, systems and technologies in the field of computer programming or networking. Topics will vary each semester. Course may be repeated for credit with a change in subtitle.
Prerequisite: None
Corequisite: None

**CPTR 2400 Web Integration**
This course covers advanced Web programming concepts with focus on database and information system integration for business software. Topics include secure programming methodologies, user account authentication and Web forms. Server-side programming languages will be utilized.
Prerequisite: CPTR1170 OR Instructor's approval
Corequisite: CPTR2230 AND CPTR2242 OR Instructor's approval

**CRJU 1101 Introduction to Criminal Justice**
This course serves as an introduction to the American criminal justice system including police, courts and correctional systems. Minnesota Police Officer Standards and Training Board objectives are also covered in this course.
Prerequisite: None
Corequisite: None

**CRJU 1102 Policing and Practices**
This course includes an introduction into the development of American policing and an understanding of the modern roles and functions of police in a democratic society. These roles and functions include responsibilities in peacekeeping, law enforcement, community policing and customer service. Minnesota Police Officer Standards and Training Board learning objectives are also covered.
Prerequisite: None
Corequisite: None

**CRJU 1104 Juvenile Justice and Delinquency**
This course covers the study of juvenile delinquency, the theories of causation and the methods of corrections. It also examines the juvenile court and correctional systems. Minnesota juvenile law will be explored as it relates to the Minnesota Police Officer Standards and Training Board objectives.
Prerequisite: None
Corequisite: None

**CRJU 1106 Introduction to Corrections Probation**
This course examines the historical and contemporary correctional theories and programs with emphasis on the current organizational structure. Probation, parole and correctional alternatives are also explored.
Prerequisite: None
Corequisite: None

**CRJU 1108 Physical Control Tactics for Corrections**
This course will deal with use of force issues relating to correctional officers, defensive tactics and control techniques, proper restraint techniques and less-than-lethal weapons training. Lecture and practical applications are included in the course. Minnesota Police Officer Standards and Training Board learning objectives relating to physical control and less-than-lethal weapons are also covered.
Prerequisite: None
Corequisite: None

**CRJU 1109 Law Enforcement Behavioral Science**
This course is devoted primarily to Minnesota Police Officer Standards and Training objectives including but not limited to the following areas: cultural awareness, stress management, domestic abuse, crisis intervention, communication, bias-motivated
COURSE DESCRIPTIONS

Prerequisite:

This course focuses on advanced programming concepts including an introduction to data structures, analysis of algorithms, recursion, searching, sorting and memory management.

Corequisite: None

CSCI 1121

Computer Science I

4/4/0

This course is designed to provide a technical background for understanding the use of computers in the real world. The course will cover both hardware and software and their applications in the world today. One of the highest-rated commercially available applications software packages will be used to gain skills necessary for word processing, electronic spreadsheet, databases and presentations. Students will use the Internet and electronic mail on a regular basis.

Corequisite: None

CSCI 1155

Computer Utilization in Business & Society

3/3/0

This course is for students who are interested in computer-related careers. Students will research careers in information technology including job duties, various job titles, salary ranges, employment and advancement prospects, and the skills and training required. Students in this course will complete individual college and career planning and goal setting plans.

Corequisite: None

CSEC 1102

Careers in Information Systems

1/1/0

This is an introductory course that will focus on the design, planning, implementation, operation and troubleshooting of wireless networks. It covers a comprehensive overview of technologies, security and design best practices with particular emphasis on hands-on skills.

Corequisite: None

CSEC 1110

Fundamentals of IT Security

2/1/0

This course is designed to further students’ understanding of directory services. Directory services provide a central repository for the information of the network. The student will learn that the first function of the directory is to provide information about objects in the directory including users and resources such as file shares, printers or email boxes. In addition, the student will learn that the information contained in the directory is crucial for the correct and secure operation of the network.

Corequisite: None

CSEC 2210

Security Breaches and Countermeasures

2/1/0

This course introduces the student to various methodologies for attacking a network. The student will be introduced to concepts, principles and techniques, supplemented by hands-on exercises for attacking and disabling a network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools.

Corequisite: None

CSEC 2222

Web Security

2/1/0

This course will give students hands-on training in securing Web communications and websites. Students will learn the common vulnerabilities of websites, implementing e-business security policies, identifying security threats, developing countermeasures and managing the deployment of security solutions.

Corequisite: None

CSEC 2214

Topics in Network Security

2/1/0

The goal of this course is to allow the investigation of a topic chosen from the current network security landscape. The topic will vary each offering depending on current trends in network security.

Corequisite: None

CSEC 2218

Disaster Recovery

2/1/0

This course provides preparation of a disaster recovery plan, implementation of the plan and recovering from a disaster. This course takes an enterprise-wide approach to developing a disaster recovery plan. Students will learn how to restore a network in the event of a disaster.

Corequisite: None

CSEC 2222

Network Security Design

2/1/0

This course will give the student the opportunity to conduct a vulnerability analysis on a network in order to practice or refine the attack methodologies with the hacker tools and techniques that the student was exposed to during the various program courses. The student must demonstrate the ability to design, plan and execute a vulnerability analysis against an organization network. The student must prepare a written report and...
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULN 1205</td>
<td>Theories of Baking and Pastry</td>
<td>2</td>
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<tr>
<td></td>
<td>This course exposes the student to the theories associated with the baking and pastry area of food service. The course introduces the student to basic principles, processes and ingredients used in the bakeshop area of a commercial kitchen.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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</tr>
<tr>
<td>CULN 1210</td>
<td>Fundamentals of Food Fabrication and Production</td>
<td>6</td>
<td>0/6/0</td>
</tr>
<tr>
<td></td>
<td>This course introduces the student to hot food preparation in a production kitchen environment. The course provides students with hands-on application and continued practice of quantity cooking skills required to prepare a variety of stocks, soups, meats, poultry, seafood, starches, vegetables and sauces. This course also covers hands-on fabrication of raw and cooked meat, poultry, seafood and fish.</td>
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<td></td>
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<tr>
<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 1215</td>
<td>Theory of Food Fabrication and Production</td>
<td>2</td>
<td>2/0/0</td>
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<td></td>
<td>This course introduces the student to the basic concepts and common practices associated with preparing quantity foods in the professional kitchen. The course will cover the fundamental culinary theories when preparing stocks, soups, vegetables, starches and sauces, as well as proper cutting and cooking of various meats, poultry, fish and seafood.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 1220</td>
<td>Fundamentals of Pastry Production</td>
<td>3</td>
<td>0/3/0</td>
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<td>This course introduces the student to line cooking by preparing a variety of hot and cold menu items in a fast-paced kitchen environment. The course provides students with hands-on application and continued practice of short order cooking and exposure to the various foods prepared in the cold kitchen/pantry.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 1230</td>
<td>Introduction to Professional Food Service</td>
<td>4</td>
<td>4/0/0</td>
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<td>This course is an introduction to the food service industry. Topics include tools and equipment, basic principles of cooking and food science, industry terminology, mise en place and food product identification.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 1240</td>
<td>Sanitation Certification</td>
<td>2</td>
<td>2/0/0</td>
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<td>This course covers the basics of safe food handling, hazards that threaten food safety systems and proper cleaning and sanitizing procedures. The course content meets the Food Manager Certification requirements for the State of Minnesota. Students will complete the National Restaurant Association ServSafe certification exam at the conclusion of the course.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 1250</td>
<td>Kitchen Math and Measurements</td>
<td>1</td>
<td>1/0/0</td>
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<td>This course is an assessment and review of math skills commonly used by food service professionals. This includes the evaluation of whole numbers, fractions, decimals and percentages.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 1260</td>
<td>Meats</td>
<td>3</td>
<td>3/0/0</td>
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<td>This course is an introduction to poultry, fish and seafood from basic classifications to preparation methods, handling techniques, market forms and accompaniments.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 1270</td>
<td>Culinary Nutrition</td>
<td>2</td>
<td>0/2/0</td>
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<td>This is an introductory course in the study of nutrition taught from the point of view of the chef. The course will outline current dietary guidelines and requirements, explore the function of nutrients, examine menus and recipes to optimize nutritional content and balance, and introduce healthy cooking techniques for a variety of diets.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 2202</td>
<td>Meats</td>
<td>2</td>
<td>2/0/0</td>
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<td>This course covers the identification of meat cuts from beef, pork, lamb and veal and proper cooking and usage for fabricated cuts. It includes USDA inspection, quality and yield standards of meats as used in the food service industry.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 2204</td>
<td>Cafe Breakfast Foundations</td>
<td>5</td>
<td>0/5/0</td>
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<td></td>
<td>This course covers the hands-on application of the skills required for a breakfast cook to prepare the typical breakfast menu items of a restaurant ranging from basic egg cookery to breakfast buffet set-up and service.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>CULN 2206</td>
<td>Buffet Presentation and Production</td>
<td>3</td>
<td>0/3/0</td>
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<td></td>
<td>This course covers the hands-on application of the skills required for a cook to plan and execute banquet and buffet set-up and service. It also provides an exposure to a variety of service types and classical forms of food presentation and display.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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</table>
CULN 2214  
Culinary Foundations Lab II  
6 0/6/0  
The course covers hands-on application and continued practice of cooking concepts such asrequired to prepare a variety of soups, meats and poultry, starches, vegetables and saucesserved in the cafe. This course also covers hands-on application of raw and cookedmeat, poultry and fish cutting and processing for items prepared in the cafe.  
Prerequisite: None  
Corequisite: None  
CULN 2222  
Supervision Lab  
6 2/4/0  
This course requires application of the practical skills and principles needed tomanage and oversee production in a commercial food operation. It includes application oflearnt skills in the areas of production, supervising, menu writing, purchasing, storeroomoperation and merchandising.  
Prerequisite: CULN1102 AND CULN1120 AND CULN1104  
Corequisite: None  
CULN 2228  
Food Cost Control  
3 3/0/0  
This course covers the cost structure of food service operations and provides methodsand applications to monitor and control food and labor costs.  
Prerequisite: None  
Corequisite: None  
CULN 2236  
Ethnic Foods  
2 1/1/0  
This course covers the history, origin and preparation methods of food products ofvarious countries and ethnic groups.  
Prerequisite: CULN1102 AND CULN1122  
Corequisite: None  
CULN 2238  
Advanced Baking, Pastry and Confections  
2 0/2/0  
This class provides students with a broad understanding, skills and techniques of baking,pastry and confections used in the industry today. The student will be introduced to cakeand pastry formulations, cake decoration, sugar and chocolate confections.  
Prerequisite: CULN1102 AND CULN1122 AND CULN1106  
Corequisite: None  
CULN 2240  
Internship  
2 0/0/2  
This course provides the student with an internship experience to apply what hasbeen learned in the classroom and practiced in the lab. The internship will take place in acommercial food service establishment under the supervision of the employer/designee.  
Prerequisite: CULN1102 AND instructor permission needed  
Corequisite: None  
CUST 1010  
Wood Properties: Strength and Quality  
3 3/0/0  
This course introduces students to the properties of wood as a manufacturing material. 
The course will focus on the physical, mechanical and chemical aspects of wood andwood products in the manufacturing environment. Participants will learn quality specifications and requirements which are standard for the needs of today’s wood-based products.  
Prerequisite: None  
Corequisite: None  
CUST 1060  
Occupational Safety and Risk Management  
2 2/0/0  
This course is an introduction to occupational safety and health in business and industry. 
It includes studying the Occupational Safety and Health Act, accident prevention techniques,job tasks and safety designs including ergonomics, job and system safety, empowering employees, and training employees for safe practices. Participants willdiscuss best practices to gain management and employee commitment to the development of a safety culture.  
Prerequisite: None  
Corequisite: None  
CVRI 1100  
Cardiovascular Technology Survey  
2 1/1/0  
This course introduces the student to the history and emerging role of cardiovascular technologist. Students will learn medical terminology and have opportunities to observe therole of the cardiovascular technologist in various settings. Students in this course willincur the cost of and be required to receive clear national and Minnesota Department of Health background checks and be listed in the North Dakota Board of Nursing Unlicensed Assistant Personnel Directory.  
Prerequisite: None  
Corequisite: North Dakota Board of Nursing Unlicensed Assistive Personnel registration AND clear Minnesota Department of Health background check AND clear national background check  
CVRI 1105  
Introduction to Cardiovascular Technology  
2 2/0/0  
In this introductory course, students will explore ethical and legal issues related to patient safety, documentation, informed consent, patient identification and confidentiality. Students will use appropriate medical terminology, abbreviations and symbols. Students will practice professional communication strategies with other health professionals and explore team dynamics.  
Prerequisite: Clear Minnesota Department of Health background check AND clear national background check AND current American Heart Association Health Care Provider CPR AND North Dakota Board of Nursing Unlicensed Assistant Personnel Registration AND successful completion (C or better) of general education prerequisite courses AND BIOL2260 AND BIOL2261 AND MATH1114 AND BIOL2267 AND BIOL2268 AND COMM1130 AND acceptance into the Cardiovascular Technology Program AND CVRI1100  
Corequisite: BIOL2262 AND BIOL2263  
CVRI 1110  
Cardiovascular Anatomy and Physiology  
3 3/0/0  
This course provides the cardiovascular technology student an in-depth review of normal anatomy and physiology of the cardiac, cardiovascular, peripheral vascular andneurovascular systems, and renal regulation of blood pressure. The pathophysiology ofthese systems is examined in order to understand and apply treatment modalities in thecardiovascular catheterization laboratory.  
Prerequisite: None  
Corequisite: CVRI1100 AND BIOL2262 AND BIOL2263  
CVRI 1120  
Principles of Patient Care  
4 2/2/0  
This course introduces the cardiovascular technology student to basic patient care principles. Students will learn basic intracardiac catheterization care including patient assessment, interpretation of laboratory values and diagnostic tests.  
Prerequisite: None  
Corequisite: CVRI1100 AND CVRI1110  
CVRI 1125  
Cardiovascular Technology I  
3 2/1/0  
This course prepares students to participate in cardiovascular diagnostic and interventional procedures with adult patients. Students will differentiate cardiovascularcomplications and emergencies, prepare and position patients for various procedures, andset up and maintain sterile fields. Students will learn concepts related to hemodynamics including cardiac output, performance of hemodynamic calculations andrecognition of blood flow determinants.  
Prerequisite: BIOL2260 AND BIOL2261 AND BIOL2267 AND BIOL2268 AND CVRI1100  
Corequisite: CVRI1105 AND CVRI1110 AND CVRI1120  
CVRI 1136  
Cardiovascular Technology Clinical  
2 0/0/2  
In this course, students will participate as part of the cardiovascular, neurovascular,peripheral vascular and electrophysiology teams during diagnostic and interventional procedures.  
Prerequisite: None  
Corequisite: CVRI1105 AND CVRI1110 AND CVRI1120 AND CVRI1130  
CVRI 2130  
Cardiovascular Technology II  
5 3/2/0  
This course builds on the knowledge and skills gained in Cardiovascular Technology I. Students will learn diagnostic and interventional procedures related to peripheralvascular, neurovascular, congenital and pediatric conditions, and complications and emergenices.  
Prerequisite: CVRI1130 AND CVRI1120  
Corequisite: None  
CVRI 2141  
Pharmacology for Cardiovascular Technology  
2 2/0/0  
This course develops the student's awareness of basic pharmacological concepts, drug classifications, indications and contraindications, therapeutic effects, side effects, and other considerations related to use of medications. Students will learn dosage calculations, pharmacokinetics and pharmacodynamics.  
Prerequisite: CVRI1130  
Corequisite: CVRI2130  
CVRI 2145  
Intravenous Therapy  
1 0/1/0  
This course provides students with the knowledge and skills used to initiate and maintain an intravenous site. Students will learn basic complications of fluid and electrolyte imbalance and acid/base imbalance, and differentiate intravenous fluids. Students will perform venous access and learn to manage complications. Students will demonstrate initiation and maintenance of fluids and secondary administration techniques, and perform intravenous dosage calculations.  
Prerequisite: None  
Corequisite: CVRI2140 AND CVRI2130  
CVRI 2250  
Radiation Safety  
2 1/1/0  
Students in this course will demonstrate safety related to the use of radiation duringcatheterization procedures. Students will learn x-ray tube components, x-ray radiographic characteristics and physics. Students will learn to position patients to perform quality assurance, produce images and differentiate between digital and flat screen imaging. Consideration will be given to radiation biology and radiation protection.  
Prerequisite: CVRI1120 AND CVRI1130  
Corequisite: CVRI2130 AND CVRI2141 AND CVRI2145  
CVRI 2262  
Cardiovascular Technology Practicum I  
5 0/0/5  
In part one of this capstone course, students will apply the knowledge and skills gainedthroughout the Cardiovascular Technology program. Students will become certified inAdvanced Cardiac Life Support (ACLS) before being assigned to various cardiovascularcatheterization laboratory opportunities. Students will function as a part of the cardiovascular team under the supervision of a preceptor. Students will participate in experiences Monday through Friday for the duration of the academic term. Shifts may rotate between day, evening, night and on-call shifts.  
Prerequisite: Successful completion (C or better) of all Cardiovascular Technology Program requirements AND current American Heart Association Health Care Provider CPR AND current Advanced Cardiac Life Support certification AND current, clear Minnesota Department of Health criminal background check AND current, clear national background check AND up-to-date immunizations and health form  
Corequisite: None  
CVRI 2263  
Cardiovascular Technology Practicum II  
5 0/0/5  
In part two of this capstone course, students will apply the knowledge and skills gainedthroughout the Cardiovascular Technology program. Students will function as a part of thecardiovascular team under the supervision of a preceptor. Students will participate inexperiences Monday through Friday for the duration of the academic term. Shifts mayrotate between day, evening, night and on-call shifts.
understanding the structures that form the foundation for tooth function, normal anatomy of the oral cavity, and tooth and root morphology. Special topics include survey of dental anomalies and forensic dentistry.

**Prerequisite:** None

**Corequisite:** None

**DENT 1103 Introduction for Dental Health Care Providers**
- **CR:** 2
- **Lec/Lab/OJT:** 1/0

The student will be introduced to fundamental knowledge required in the practice of dentistry. Topics to be covered include blood-borne pathogens, concepts and procedures of infection control, medical emergencies, first aid in the dental setting and patient privacy rights.

**Prerequisite:** None

**Corequisite:** None

**DENT 1104 Dental Health Care Providers II**
- **CR:** 1
- **Lec/Lab/OJT:** 1/0

This course will build on student learning in Introduction to Healthcare Providers I. Students will be challenged to go beyond definitions and practices and understand the what, why and how of blood-borne pathogens, concepts, standards and procedures of infection control, medical emergencies, first aid in the dental setting and patient privacy rights.

**Prerequisite:** None

**Corequisite:** None

**DENT 1106 Dental Radiology Lecture**
- **CR:** 3
- **Lec/Lab/OJT:** 0/0/3

This course includes an overview of the history of x-ray development and a review of basic mathematics and radiation physics as they apply to x-ray production. Radiographic film and digital image quality are explored. Explanation of darkroom chemistry, radiation aspesis and safety are covered. Other topics include interpretation of normal anatomy, dental film and digital image analysis, radiographic interpretation and evaluation, and quality assurance issues.

**Prerequisite:** None

**Corequisite:** None

**DENT 1122 Dental Ethics and Jurisprudence**
- **CR:** 1
- **Lec/Lab/OJT:** 1/0

This course focuses on the ethical and legal implications of providing dental, dental assisting and dental hygiene care. The practice acts for Minnesota and North Dakota will also be studied.

**Prerequisite:** None

**Corequisite:** None

**DIAT 1100 Role of the Dialysis Technician**
- **CR:** 2
- **Lec/Lab/OJT:** 2/0/0

This course introduces the student to the role of the dialysis technician; the history of dialysis; medical terminology related to dialysis and renal failure; state and federal regulations; professional development; legal and ethical issues related to dialysis; and care of the renal patient.

**Prerequisite:** None

**Corequisite:** None

**DIAT 1102 Anatomy and Physiology of the Urinary System**
- **CR:** 2
- **Lec/Lab/OJT:** 1/0

This course focuses on urinary system anatomy and physiology. Topics include normal renal function and renal pathophysiology, with an emphasis on the consequences of untreated renal conditions.

**Prerequisite:** None

**Corequisite:** None

**DIAT 1105 Principles of Dialysis**
- **CR:** 3
- **Lec/Lab/OJT:** 3/0/0

This course introduces the student to principles of dialysis including osmosis, diffusion and filtration; treatment modalities; structure and function of different dialysis access sites; interpretation of routine lab tests; pharmacology related to chronic kidney disease; and potential complications of dialysis.

**Prerequisite:** High School Diploma or GED AND American Heart Association Health Care Provider CPR AND Mn Department of Health background check indicates the student is able to provide direct patient care

**Corequisite:** DIAT1100 AND DIAT1101

**DIAT 1115 Principles of Dialysis Lab**
- **CR:** 3
- **Lec/Lab/OJT:** 0/3/0

This lab course provides the student with experience in routine lab collection techniques; medication administration; principles of aseptic technique; preparation, cannulation and use of different dialysis access sites; use of central venous catheters and patient monitoring and discharge. Students will be introduced to dialysis delivery systems and dialysate, and practice implementation of state and federal regulations in a simulation setting.

**Prerequisite:** High School Diploma or GED AND American Heart Association Health Care Provider CPR AND Mn Department of Health background check indicates the student is able to provide direct patient care

**Corequisite:** DIAT1105

**DIAT 1205 Dialysis Technician Practicum**
- **CR:** 3
- **Lec/Lab/OJT:** 0/0/3

In this capstone practicum course, students will apply knowledge and skills learned by functioning as a member of the dialysis team within the scope of a dialysis technician under the supervision of a licensed nurse.

**Prerequisite:** DIAT1100 AND DIAT1105 AND DIAT1115 AND Current American Heart Association Health Care Provider CPR. AND Current MN Department of Health background check indicates the student is able to provide direct patient care AND Current national background check indicates the student is able to provide direct patient care AND Current, required program immunizations

**Corequisite:** DIAT1200

**DNAS 1103 Clinical Assisting I**
- **CR:** 6
- **Lec/Lab/OJT:** 3/0/3

This course includes an orientation to the history of dentistry, educational requirements,
<table>
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<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OIT</th>
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<tbody>
<tr>
<td>DNAS 1105 Clinical Assisting II</td>
<td>5 1/4/0</td>
<td>Dental assisting students apply skills in a clinical setting. This course prepares the student to adapt chairside skills to assist with dental specialties as they are performed in the general practice. Students will apply skills developed in Dental Anatomy, Biomaterials, Biodental Science and Dental Practice Management as they apply to the practice of dental assisting.</td>
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<td>Corequisite: None</td>
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<tr>
<td>DNAS 1106 Biodental Science</td>
<td>3/0/0</td>
<td>This course provides an introduction to anatomy and physiology, an introduction to dental histology, embryology and an overview of head and neck anatomy using the universal charting system. This course also is designed to give the student a basic concept of microbiology and disease transmission and a survey of oral pathology and pharmacology. The student will be introduced to the basic concepts of nutrition in the dental profession.</td>
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<td>Corequisite: None</td>
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<td>DNAS 1114 Dental Practice Management</td>
<td>2 2/0/0</td>
<td>This course is designed for students with instructions in the principles and applications that are related to the management of an dental office. Emphasis is placed on managing patient records through computer-generated charting, financial records, third-party payments, appointment scheduling, inventory and recall systems.</td>
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<td>Corequisite: None</td>
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<tr>
<td>DNAS 1119 Advanced Functions</td>
<td>5 2/3/0</td>
<td>This course is designed to provide the student with instruction and practice to perform the clinical competency in the following intra-oral functions approved by the Minnesota Board of Dentistry: taking radiographic exposures, performing mechanical polishing, taking preliminary impressions and bite registrations, applying topical fluoride, placing and removing periodontal dressing, removing excess cement, monitoring nitrous oxide-induced patients, induction of nitrous oxide/oxygen sedation, removing excess bond from orthodontic appliances with rotary instruments and applying pit and fissure sealants. In addition the following intra-oral functions are taught and practiced to laboratory competency: removing sutures, preliminary adaptation of temporary provisional crowns, performing selected orthodontic functions, applying bleaching agents and performing approved endodontic procedures.</td>
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<td>Corequisite: None</td>
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<tr>
<td>DNAS 1144 Dental Assisting Clinical Affiliations</td>
<td>6 0/0/6</td>
<td>This course is a faculty-supervised course at extramural sites with dentists and dental auxiliaries providing ancillary supervision. The student will be provided with clinical experiences by affiliations in general dentistry and/or specialized practices. Emphasis is on professionalism in performing general chairside and advanced intraoral procedures.</td>
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<tr>
<td>Corequisite: None</td>
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<tr>
<td>DNAS 1210 Radiology Lab</td>
<td>1 0/1/0</td>
<td>In this course dental assisting students expose full-mouth series, both film-based and digital, extra-oral and specialized radiographs on adult and child mannequins. Emphasis is on protection against x-ray hazards and record keeping. Students will also process radiographs and evaluate radiographs for diagnostic value. In addition, they will use radiographs to explain dental health and treatment plans. Lab sessions will allow students to develop radiographic skills, and clinic sessions create an opportunity for students to enhance their efficiency in radiographic technique.</td>
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<td>Corequisite: DNEN106</td>
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<tr>
<td>DNAS 1212 Radiology Lab II</td>
<td>1 0/1/0</td>
<td>In this course dental assisting students expose full-mouth series, both film-based and digital, extra-oral and specialized radiographs on adult and child patients. Emphasis is placed on protection against x-ray hazards and record keeping. Students will also process, mount and evaluate radiographs for diagnostic value. In addition, they will use radiographs to explain dental health and treatment plans. Lab sessions will allow students to develop radiographic skills, and clinic sessions create an opportunity for students to enhance their efficiency in radiographic technique.</td>
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<td>Corequisite: DNEN1210</td>
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<tr>
<td>DNAS 1215 Dental Specialties</td>
<td>1 1/0/0</td>
<td>This course introduces the student to the dental specialties of pediatric dentistry, periodontics, oral and maxillofacial surgery, endodontics, orthodontics and prosthodontics, both fixed and removable. This course will provide the student with an introduction to the clinical procedures with each of the specialties listed. Students will research various dental assisting specialties by interviewing dental assistants in specialty practices.</td>
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<td>Corequisite: None</td>
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<tr>
<td>DNYH 1104 Dental Anatomy Lab</td>
<td>1 0/1/0</td>
<td>This lab course provides opportunities for the student to work with tooth identification and charting systems, intraoral imagery and occlusion assessment. Special topics include survey of dental anomalies and cavity classifications.</td>
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<td>Corequisite: None</td>
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<tr>
<td>DNYH 1106 Head and Neck Anatomy</td>
<td>2 2/0/0</td>
<td>This course includes an introduction to the microscopic anatomy of the oral tissues and the embryonic development of the face and oral cavity with emphasis on the masticatory system.</td>
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<td>Corequisite: Acceptance into the dental hygiene program</td>
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<tr>
<td>DNYH 1108 Oral Histology and Embryology</td>
<td>2 2/0/0</td>
<td>This course provides the student with understanding of the microscopic anatomy of the oral tissues and the embryonic development of the face and oral cavity with emphasis on the masticatory system.</td>
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<td>Corequisite: None</td>
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<tr>
<td>DNYH 1119 Radiology Lab</td>
<td>2 0/2/0</td>
<td>This course puts into practice knowledge gained from DNYH 1106 Dental Radiology Lecture. Students expose full-mouth series (film-based and digital), extra-oral and specialized radiographs on adult and pedodontic patients or mannequins. Emphasis is placed on radiation safety practices, infection control and record keeping. Students will enjoy, process, evaluate radiographs for diagnostic value and quality. Emphasis is placed on radiological interpretation and patient education. The lab and clinical experiences are designed to create an opportunity for students to enhance the efficiency and quality of their radiographic techniques.</td>
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<td>Corequisite: None</td>
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<tr>
<td>DNYH 1110 Principles I</td>
<td>2 2/0/0</td>
<td>This course introduces the student to dental hygiene with emphasis on theory of preventive dentistry, OSHA standards, disinfectant/sterilants, formation of plaque and calculus, patient assessment and an introduction to the caries process and periodontal assessment.</td>
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<tr>
<td>Corequisite: None</td>
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<tr>
<td>DNYH 1112 Dental Hygiene Practice I</td>
<td>3 0/3/0</td>
<td>This course provides an introduction to dental hygiene with emphasis on the practice of preventive dentistry, care and use of equipment, sterilization techniques and an introduction to instrumentation.</td>
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<tr>
<td>Corequisite: None</td>
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<tr>
<td>DNYH 1118 Oral Pathology</td>
<td>2 2/0/0</td>
<td>This course provides an introduction to general processes as well as oral disease processes. Special emphasis is placed on clinical and radiographic recognition of pathology of the oral cavity.</td>
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<td>Corequisite: Accepted into the dental hygiene program and successful completion of Principles I, II, III; Head and Neck Anatomy; and Oral Histology and Embryology</td>
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<td>Corequisite: None</td>
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<tr>
<td>DNYH 1119 Dental Hygiene Practice II</td>
<td>4 4/0/0</td>
<td>This course is a continuation of DNYH 1110 with continuing information on the fundamentals of dental hygiene, record keeping and basic instruction and care of special needs patients.</td>
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<tr>
<td>Corequisite: DNYHY1110</td>
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<tr>
<td>DNYH 1112 Dental Hygiene Practice II</td>
<td>5 0/5/0</td>
<td>This course is a continuation of DNYH 1112, Dental Hygiene Practice I, and introduces the student to further instrumentation theory, instrumentation techniques and procedures, clinical protocol, evaluation of medical/dental histories and radiographic surveys as prescribed by a dentist. This course provides opportunity for the student to develop competence in clinical procedures.</td>
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<tr>
<td>Corequisite: DNYHY1112</td>
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<tr>
<td>DNYH 1124 Pain Control Lab</td>
<td>2 0/2/0</td>
<td>This course provides the dental hygiene student with the knowledge and skills necessary to administer local anesthesia and other methods of pain control during dental procedures without inducing detrimental physiological side effects.</td>
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<tr>
<td>Corequisite: DNYHY1106 AND DNYHY1136</td>
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<tr>
<td>Corequisite: None</td>
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<tr>
<td>DNYH 1130 Dental Hygiene Practice III</td>
<td>1 1/0/0</td>
<td>This course is a continuation of DNYH 1119 with emphasis on Minnesota Board of Dentistry allowable procedures for dental hygienists. The course includes the study of rubber dam placement, sealants, orthodontic patients, debonding and intraoral photography.</td>
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<td>Corequisite: DNYHY1123</td>
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<tr>
<td>Corequisite: None</td>
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<tr>
<td>DNYH 1132 Dental Hygiene Practice III</td>
<td>1 0/1/0</td>
<td>This course is a continuation of DNYH1123 with emphasis on Minnesota Board of</td>
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<td>Course #</td>
<td>Course Title</td>
<td>CR</td>
<td>Lec/Lab/OJT</td>
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<tr>
<td>DNHY 1123</td>
<td>Dental Pharmacology</td>
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<tr>
<td>DNHY 1130</td>
<td>Dental Hygiene Principles I</td>
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<td>DNHY 1213</td>
<td>Dental Hygiene Principles IV</td>
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<td>DNHY 2219</td>
<td>Periodontology</td>
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<td>DNHY 2220</td>
<td>Dental Hygiene Principles V</td>
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<td>DNHY 2223</td>
<td>Dental Hygiene Practice V</td>
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<td>DNHY 2226</td>
<td>Community Dental Hygiene</td>
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<td>DNHY 2232</td>
<td>Dental Hygiene Review</td>
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<td>DNHY 2240</td>
<td>Clinical Affiliation I</td>
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<tr>
<td>DNHY 2246</td>
<td>Clinical Affiliation II</td>
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<tr>
<td>DSET 1100</td>
<td>Diesel Equipment Fundamentals</td>
<td>2</td>
<td>2/1/0</td>
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<tr>
<td>DSET 1101</td>
<td>Software Systems in Transportation</td>
<td>2</td>
<td>1/1/0</td>
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<tr>
<td>DSET 1106</td>
<td>Fuel Systems</td>
<td>2</td>
<td>1/0/0</td>
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<tr>
<td>DSET 1110</td>
<td>Power Train I</td>
<td>3</td>
<td>1/2/0</td>
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<tr>
<td>DSET 1112</td>
<td>Hydraulics I</td>
<td>4</td>
<td>2/2/0</td>
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<tr>
<td>DSET 1114</td>
<td>Vehicle Brakes</td>
<td>3</td>
<td>1/2/0</td>
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<tr>
<td>DSET 1116</td>
<td>Fall Supervised Occupational Experience</td>
<td>3</td>
<td>0/0/3</td>
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<tr>
<td>DSET 1124</td>
<td>Diesel Shop Management</td>
<td>1</td>
<td>1/0/0</td>
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<tr>
<td>DSET 1130</td>
<td>Trans Elec/Start/Charge</td>
<td>2</td>
<td>2/2/0</td>
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<tr>
<td>DSET 1132</td>
<td>Introduction to Engine Theory</td>
<td>2</td>
<td>2/0/0</td>
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<td>DSET 1134</td>
<td>Introduction to Engines</td>
<td>3</td>
<td>0/3/0</td>
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<td>DSET 1140</td>
<td>Supervised Occupational Experience I</td>
<td>7</td>
<td>0/0/7</td>
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<tr>
<td>DSET 1144</td>
<td>Electrical Troubleshooting</td>
<td>3</td>
<td>1/2/0</td>
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</tbody>
</table>

**Course Title Details**

- **Dental Pharmacology**: This course introduces dental hygiene students to basic drug categories, pharmacological pain control principles and various anesthesia techniques, with special emphasis on a succinct accounting of drugs as they relate to dentistry.

- **Dental Hygiene Principles I**: A continuation of DNHY 1130 and introduces the student to dietary counseling, with special emphasis on advanced dental hygiene techniques including periodontal assessment and debridement, power instrumentation and implant maintenance.

- **Dental Hygiene Principles IV**: A continuation of DNHY 1132 with emphasis on the treatment of moderate to advanced periodontal disease, the development of speed and an introduction to several advanced dental hygiene techniques.

- **Dental Hygiene Principles V**: This course is designed to give the student an understanding of a diesel shop environment. Personal and shop safety will be emphasized. Hand tool, pneumatic tool, precision measuring tool and hardware identification, usage and safety will also be areas of study.

- **Dental Hygiene Practice IV**: This course covers the pathogenesis, diagnosis and treatment of periodontal disease. Emphasis will include the progression of periodontal disease, diagnostic methods, treatment modalities, advanced instrumentation and the role of the dental hygienist as a periodontal co-therapist.

- **Dental Hygiene Practice V**: This course covers the pathogenesis, diagnosis and treatment of periodontal disease. Emphasis will include the progression of periodontal disease, diagnostic methods, treatment modalities, advanced instrumentation and the role of the dental hygienist as a periodontal co-therapist.

- **Community Dental Hygiene**: The lecture portion of this course introduces the student to the disciplines and basic principles of dental public health, epidemiological methods and biostatistical measurement and analysis. The lab portion of this course enables the student to plan, implement and evaluate a community dental hygiene research project and participate in a community dental service project and screening.

- **Dental Hygiene Review**: This course is designed to assist students in reviewing content in preparation to write the National Board Dental Hygiene Examination.

- **Clinical Affiliation I**: This course consists of clinical rotations off campus in public health facilities to enhance dental hygiene clinical experience. The student will be introduced to a variety of dental hygiene experiences.

- **Clinical Affiliation II**: This course consists of clinical rotations off campus in public health facilities to enhance dental hygiene clinical experience. The student will be introduced to a variety of dental hygiene experiences.

- **Diesel Equipment Fundamentals**: This course is designed to give the student an understanding of a diesel shop environment. Personal and shop safety will be emphasized. Hand tool, pneumatic tool, precision measuring tool and hardware identification, usage and safety will also be areas of study.

- **Software Systems in Transportation**: This course introduces students to proprietary software used in the diesel technology industry. Students will become familiar with various software from industry-leading manufacturers.

- **Fuel Systems**: This course covers the fundamentals of diesel engine fuel systems, identification, minor repair, testing and troubleshooting. Mechanical governor operation, fuel system operation, fuel system/governor adjustments and related engine operation are studied.

- **Power Train I**: This course covers the operating principles, diagnosis and repair of drive train components. Components included will be clutches, mechanical transmissions, drive lines and drive axles.

- **Hydraulics I**: This course covers the fundamentals of hydraulic systems. It is an introduction to hydraulic component operation, maintenance, repair and testing. These systems may be used in agricultural, industrial heavy equipment and trucks.

- **Vehicle Brakes**: This course covers hydraulic and air brake system operation, service and diagnosis. Anti-lock braking systems will also be covered.

- **Fall Supervised Occupational Experience**: Students will apply skill sets previously learned specific to their sponsoring dealer’s equipment and will also be introduced to curriculum skill sets to be delivered in future semesters. Skill sets will be identified in a training plan developed by industry and instructor.

- **Diesel Shop Management**: This course provides students an opportunity to visit John Deere, Case New Holland or general shops and work with on-site instructors as it relates to management procedures including parts, ordering inventory, repair order writing, payroll, employee-employer relations, customer relations and communication skills.

- **Trans Elec/Start/Charge**: This course introduces the theory of today’s diesel engines, including operation, repair and maintenance. Students will learn how to use DVOMs and their applications. Students will study electrical theory including Ohm’s law and its application to electrical systems. The course also introduces service procedures necessary to repair charging and starting system components. Electrical principles are applied to test and troubleshoot complete circuits as well as components of each. Fundamental rebuilding principles and system analysis are emphasized. Safe battery testing and service are performed.

- **Introduction to Engine Theory**: This course introduces the theory of today’s diesel engines, including operation, repair and maintenance. Students will learn the proper industry procedures for removing, replacing, diagnosing, troubleshooting, rebuilding and assembling diesel engines.

- **Introduction to Engines**: This course teaches students how to disassemble, analyze, rebuild, measure and adjust diesel engines and their components.

- **Supervised Occupational Experience I**: Students will apply skill sets previously learned related to truck and/or other diesel-powered equipment and may be introduced to curriculum skill sets to be delivered in future semesters. Skill sets will be identified in a training plan developed by industry and instructor.

- **Electrical Troubleshooting**: This course is a hands-on troubleshooting course that allows students to apply knowledge of DSET 1130. Students will be required to troubleshoot and repair a variety of equipment and vehicles.
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<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
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<tbody>
<tr>
<td>DSET 2204</td>
<td>Advanced Electrical and Emission Systems</td>
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<td>3/1/2/0</td>
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<tr>
<td>Corequisite:</td>
<td>DSET1100 AND DSET1130</td>
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<tr>
<td>Prerequisite:</td>
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<tr>
<td>DSET 2206</td>
<td>Electronic Controls</td>
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<tr>
<td>Prerequisite:</td>
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<td>DSET 2210</td>
<td>Mobile Hydraulics</td>
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<td>4/1/3/0</td>
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<td>Corequisite:</td>
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<td>DSET 2211</td>
<td>Suspension and Alignment</td>
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<td>Prerequisite:</td>
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<td>DSET 2212</td>
<td>Advanced Fuels</td>
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<tr>
<td>Prerequisite:</td>
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<td>DSET 2213</td>
<td>Advanced Engines &amp; Fuel Systems I</td>
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<td>DSET 2218</td>
<td>Internship</td>
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<td>DTRK 2230</td>
<td>Advanced Engines I</td>
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<tr>
<td>DTRK 2238</td>
<td>Transmissions &amp; Drive Systems</td>
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<td>DTRK 2240</td>
<td>Supervised Occupational Experience II</td>
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<td>Prerequisite:</td>
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<tr>
<td>DTRK 2244</td>
<td>Advanced Engines and Fuel Systems</td>
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<td>Prerequisite:</td>
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<td>DTRK 214</td>
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<td>DTRK 2214</td>
<td>Suspension and Alignment</td>
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<td>Prerequisite:</td>
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<td>ECON 2210</td>
<td>Macroeconomics</td>
<td>3</td>
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<td>This course provides the student with a means to study economic principles as they relate to determinants of national income, national income accounting, business cycles, unemployment, inflation and aggregate expenditures. The course also examines macroeconomic policy and provides information to gain further understanding in the areas of fiscal policy, financial markets, money and banking, monetary policy, international policy and the varying viewpoints that have evolved throughout history, including the Keynesian and Monetarist schools of thought. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ECON 2222</td>
<td>Microeconomics</td>
<td>3</td>
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<td>Microeconomics stresses the concepts of scarcity, production possibilities, supply and demand curves, elastic and inelastic goods and services, competition, monopolies, oligopolies, poverty and income distribution in the United States. In general, microeconomics examines the functioning of individual industries and the behavior of the individual. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ED 2205</td>
<td>Introduction to Education and Technology</td>
<td>2</td>
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<td>This course is an introduction to the career of teaching, along with the development of technology skills. Specific variables related to teaching as a profession are explored including professional roles and responsibilities, students, curriculum and the structure of schools. This course is to be taken concurrently with ED 2206. Prerequisite: None Corequisite: None</td>
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<td>ED 2206</td>
<td>Early Field Experience</td>
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<td>This course is an early educational field experience. Students will be placed at a K-12 educational site and be supervised by an experienced instructor. The student’s primary role is as an observer of the classroom, but students may be asked to provide assistance in the classroom setting under the instructor’s supervision. Prerequisite: None Corequisite: ED2205</td>
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<tr>
<td>ED 2294</td>
<td>Educational Psychology</td>
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<td>This course is intended to provide an overview of the theories and principles from psychology that are applicable to the teaching profession. The course addresses motivation, learning, development, instruction, assessment and classroom management, and it is designed to be a foundation for future methods and issues courses in education. Prerequisite: None Corequisite: None</td>
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<td>EDUC 1112</td>
<td>Job Search Skills</td>
<td>1</td>
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<td>This course is designed to develop the successful job search, application, resume writing, interviewing and job maintenance skills needed to conduct an effective job search. Prerequisite: None Corequisite: None</td>
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<tr>
<td>EDUC 1113</td>
<td>Career and Life Planning</td>
<td>2</td>
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<td>This course is designed to assist students in developing career exploration skills and strategies through self-exploration, cultural perceptions, and career and college major identification. Students will identify potential major and career possibilities. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ELEC 1100</td>
<td>Electrical Safety</td>
<td>1</td>
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<td>This course provides students with an understanding of occupational safety practices and requirements associated with working in the electrical industry. It also covers the purpose and enforcement of general safety rules. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ELEC 1102</td>
<td>Introduction to Electric Circuit Theory</td>
<td>2</td>
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<td>This course provides the student with knowledge of electrical theory including atomic structure, Ohm’s law, series circuits, parallel circuits, complex circuits and sine wave principles as related to the National Electrical Code. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ELEC 1104</td>
<td>Introduction to National Electrical Code</td>
<td>2</td>
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<td>This course provides the student with an introduction to the National Electrical Code. The student develops basic skills and understanding of the National Electrical Code and how it applies to electrical applications in the field. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ELEC 1107</td>
<td>Introduction to Residential Wiring</td>
<td>3</td>
<td>1/2/0</td>
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<td>This course provides a fundamental technical understanding of residential wiring. Basic wiring skills for residential occupancies will be practiced in lab settings while applying National Electrical Code standards. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ELEC 1108</td>
<td>Electrical Circuit Theory</td>
<td>4</td>
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<td>This course provides the student with an understanding of complex AC circuits, single-phase and three-phase circuit connections, transformer principles and calculations. Prerequisite: ELEC1102 Corequisite: None</td>
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<tr>
<td>ELEC 1110</td>
<td>Electric Motors and Generators</td>
<td>4</td>
<td>2/2/0</td>
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<td>This course provides a fundamental understanding of electric motor and generator theory and basic skills. This course includes types, construction, operation, installation and maintenance of electric motors and generators. Prerequisite: ELEC1102 Corequisite: None</td>
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<tr>
<td>ELEC 1111</td>
<td>Residential Wiring</td>
<td>3</td>
<td>1/2/0</td>
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<td></td>
<td>This course provides students with expanded technical understanding and critical thinking necessary for residential wiring. Students will be provided with experience for installations common to residential structures including general receptacles, lighting and designated circuit layout and installation. Prerequisite: ELEC1107 Corequisite: None</td>
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<tr>
<td>ELEC 1114</td>
<td>National Electrical Code</td>
<td>2</td>
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<td>This course provides students with an understanding of National Electrical Code articles related to overcurrent protection, raceways, special systems, panelboards, motors, compressors, transformers and the State Electrical Act. Prerequisite: ELEC1104 Corequisite: None</td>
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<tr>
<td>ELEC 1115</td>
<td>Solar Photovoltaic Installation</td>
<td>1</td>
<td>1/0/0</td>
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<td>This course covers the installation of photovoltaic (PV) solar panels and associated equipment. Topics include principles of operation, payback, safety concerns, site selection, system types and sizing. The primary focus is how to install the units so they are in compliance with the National Electrical Code. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ELEC 1116</td>
<td>Conduit/Tool Applications</td>
<td>2</td>
<td>0/2/0</td>
</tr>
<tr>
<td></td>
<td>Numerous applications and skills will be developed in this course including boring, threading and installation of various types of conduit. This course also provides a review of the operation and safety of both hand and power tools used in the construction electricity field. Prerequisite: ELEC1100 Corequisite: None</td>
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<tr>
<td>ELEC 1118</td>
<td>Electrical Services</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td></td>
<td>This course covers requirements and installation of service entrance equipment. Topics include service materials, installation procedures, meters, service and conduit sizes, panel types, bonding, grounding and overcurrent protection. Prerequisite: ELEC1104 Corequisite: None</td>
<td></td>
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</tr>
<tr>
<td>ELEC 1122</td>
<td>Introduction to Electrical Materials</td>
<td>1</td>
<td>0/1/0</td>
</tr>
<tr>
<td></td>
<td>This course provides the student with an introduction to the electrical material used in industry. The student develops basic skills and understanding of the material and how it applies to electrical applications in the field. Prerequisite: None Corequisite: None</td>
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</tr>
<tr>
<td>ELEC 1124</td>
<td>Introduction to Electrical Blueprint Reading</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td></td>
<td>This course provides the student with a working knowledge of residential blueprints and specifications. The student gains an understanding of blueprints, then interprets and applies this knowledge to the electrical industry. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ELEC 1130</td>
<td>Electrical Blueprints</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td></td>
<td>The student will learn to read commercial blueprints with an emphasis on electrical circuitry including lighting, power, service, feeders and special systems. The course also introduces the student to computer-aided design (CAD) drawings. Prerequisite: ELEC1124 Corequisite: None</td>
<td></td>
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</tr>
<tr>
<td>ELEC 1140</td>
<td>Power-Limited Exam Prep</td>
<td>2</td>
<td>2/0/0</td>
</tr>
<tr>
<td></td>
<td>This course covers the knowledge base associated with the Minnesota Power-Limited Technician license and includes all of the topics identified in the Minnesota Board of Electricity PLT study guide. Subjects covered include those found in the National Electrical Code and in Minnesota laws and rules. Additional subjects covered include technical terminology, formulas and procedures that are element of the PLT examination, not all of which are found in the NEC. Prerequisite: None Corequisite: None</td>
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<tr>
<td>ELEC 1170</td>
<td>Predictive Maintenance Technology</td>
<td>2</td>
<td>1/1/0</td>
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<tr>
<td></td>
<td>This course is designed to introduce students to the current predictive maintenance technology used in the best maintenance practices of top-performing companies in industry. The course will cover infrared thermography, vibration analysis, ultrasonic detection, oil spectrum analysis, motor current analysis and other technologies. These methods are used in electrical and mechanical maintenance programs in industry to predict failures of electrical connections, equipment, bearings and other electrical machines. Students will also be introduced to best maintenance practices and their impact on the future of industry in the United States. Prerequisite: None Corequisite: None</td>
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Minnesota State Community and Technical College
Course Catalog 2017-2018
<table>
<thead>
<tr>
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<th>Course Title</th>
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<th>Lec/Lab/OJT</th>
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<tbody>
<tr>
<td>ELEC 1175</td>
<td>Best Maintenance Practices I</td>
<td>2</td>
<td>1/0/0</td>
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<tr>
<td>ELEC 2202</td>
<td>Heating/Cooling Controls</td>
<td>3</td>
<td>1/2/0</td>
</tr>
<tr>
<td>ELEC 2205</td>
<td>Introduction to Commercial Wiring</td>
<td>3</td>
<td>1/2/0</td>
</tr>
<tr>
<td>ELEC 2206</td>
<td>Introduction to Motor Control Applications</td>
<td>2</td>
<td>1/0/0</td>
</tr>
<tr>
<td>ELEC 2208</td>
<td>Programmable Logic Controllers</td>
<td>2</td>
<td>1/0/0</td>
</tr>
<tr>
<td>ELEC 2211</td>
<td>Electronic Motor Control</td>
<td>3</td>
<td>2/1/0</td>
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<tr>
<td>ELEC 2212</td>
<td>Commercial Wiring</td>
<td>2</td>
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<tr>
<td>ELEC 2214</td>
<td>Industrial Wiring</td>
<td>2</td>
<td>1/0/0</td>
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<tr>
<td>ELEC 2216</td>
<td>Motor Control Application</td>
<td>3</td>
<td>1/2/0</td>
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<tr>
<td>ELEC 2217</td>
<td>Building Automation I</td>
<td>2</td>
<td>0/2/0</td>
</tr>
<tr>
<td>ELEC 2218</td>
<td>Building Automation II</td>
<td>2</td>
<td>0/2/0</td>
</tr>
<tr>
<td>ELEC 2220</td>
<td>Electrician Internship</td>
<td>3</td>
<td>0/0/3</td>
</tr>
<tr>
<td>ELEC 2222</td>
<td>Advanced Programmable Logic Controllers</td>
<td>3</td>
<td>1/2/0</td>
</tr>
<tr>
<td>ELEC 2225</td>
<td>Transformers</td>
<td>2</td>
<td>0/2/0</td>
</tr>
<tr>
<td>ELEC 2228</td>
<td>Electrical Troubleshooting</td>
<td>1</td>
<td>0/1/0</td>
</tr>
<tr>
<td>ELEC 2234</td>
<td>Hydraulics/Pneumatics</td>
<td>2</td>
<td>1/1/0</td>
</tr>
<tr>
<td>ELEC 2236</td>
<td>Industrial Motor Maintenance</td>
<td>2</td>
<td>1/1/0</td>
</tr>
<tr>
<td>ELEC 2240</td>
<td>Code Update</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>ELEC 2244</td>
<td>National Electrical Code Changes</td>
<td>1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>ELEC 2246</td>
<td>Advanced Electronics</td>
<td>2</td>
<td>1/1/0</td>
</tr>
<tr>
<td>ELEC 2248</td>
<td>Code Applications</td>
<td>2</td>
<td>1/1/0</td>
</tr>
<tr>
<td>ELEC 2250</td>
<td>Special Topics/Projects</td>
<td>2</td>
<td>0/2/0</td>
</tr>
<tr>
<td>ELL 0050</td>
<td>English Language Learner Foundations</td>
<td>4</td>
<td>3/1/0</td>
</tr>
</tbody>
</table>

This grammar-based course is for non-native learners of English and is designed to provide English language proficiency for non-native English speakers.

This course covers the student with the opportunity to work for an electrician or in another approved electrical setting. The student will experience working at the job site with other employees and under various working conditions.

This course presents practical applications of Advanced Programmable Logic Controllers (APC) with emphasis on advanced programming techniques and analog modules, input devices and hands-on wiring of Programmable Logic Controller (PLC) circuits. PLC programs are created and installed for operation of actual electrical equipment.

This course covers the concepts of transformer operation. Single-phase and threephase (polyphase) transformer operation and installation methods are explored. Included in the course are the following topics: transformer operation, transformer relationships, transformer loss, transformer testing, series and parallel operation, connections, instrument transformers and maintenance procedures. National Electrical Code requirements for transformer installations are developed and utilized.

This course provides the student with the opportunity to work for an electrician or in another approved electrical setting. The student will experience working at the job site with other employees and under various working conditions.

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This grammar-based course is for non-native learners of English and is designed to...
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
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</tr>
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<tbody>
<tr>
<td>ELL 1060</td>
<td>English Language Learner Reading</td>
<td>3</td>
<td>3/0/0</td>
</tr>
<tr>
<td>ELL 1060</td>
<td>This writing course is for non-native learners of English. Students will learn the skills and vocabulary necessary to read college-level materials with emphasis given to effective note taking and summarizing. Students will engage in frequent large and small group discussions of reading material and be exposed to a variety of reading strategies.</td>
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<tr>
<td>ELL 1060</td>
<td>Prerequisite: None</td>
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<tr>
<td>ELL 1060</td>
<td>Corequisite: None</td>
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</tr>
<tr>
<td>ELL 1080</td>
<td>English Language Learner Writing</td>
<td>4</td>
<td>3/1/0</td>
</tr>
<tr>
<td>ELL 1080</td>
<td>This writing course is for non-native learners of English and is designed to prepare students for ELL1080: ELL Writing I. Students will learn the short essay form for expository writing, emphasizing sentence and paragraph structures as well as editing for increased accuracy.</td>
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<tr>
<td>ELL 1080</td>
<td>Prerequisite: None</td>
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<tr>
<td>ELL 1080</td>
<td>Corequisite: None</td>
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<tr>
<td>ELL 1175</td>
<td>English Language Learner Listening</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>ELL 1175</td>
<td>This course for non-native learners of English continues the development of listening and speaking skills necessary for participating in college-level discussion, incorporates oral presentation and fosters critical listening skills needed for taking notes and understanding lectures.</td>
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<tr>
<td>ELL 1175</td>
<td>Prerequisite: None</td>
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<tr>
<td>ELL 1175</td>
<td>Corequisite: None</td>
<td></td>
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</tr>
<tr>
<td>ELWT 1102</td>
<td>Electrical Line Worker Theory I</td>
<td>4</td>
<td>2/2/0</td>
</tr>
<tr>
<td>ELWT 1102</td>
<td>This course provides the student with basic electrical theory involved in the production and use of electrical energy. In addition, the student practices basic direct and alternating current circuitry calculations and rigging skills including basic knots and splices pertaining to the electrical industry.</td>
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<tr>
<td>ELWT 1102</td>
<td>Prerequisite: None</td>
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<tr>
<td>ELWT 1102</td>
<td>Corequisite: None</td>
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<tr>
<td>ELWT 1104</td>
<td>Electrical Structure Installation</td>
<td>5</td>
<td>2/3/0</td>
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<tr>
<td>ELWT 1104</td>
<td>This course provides the student with the introductory knowledge and skills necessary to properly install electrical structures with hand tools and with mechanized structure installation machinery.</td>
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<tr>
<td>ELWT 1104</td>
<td>Prerequisite: None</td>
<td></td>
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<tr>
<td>ELWT 1104</td>
<td>Corequisite: None</td>
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<tr>
<td>ELWT 1106</td>
<td>Climbing Electrical Structure</td>
<td>4</td>
<td>0/4/0</td>
</tr>
<tr>
<td>ELWT 1106</td>
<td>This course provides the student with the knowledge and skills to safely climb and frame various electrical structures to heights of 50 feet. Topics include free-hand and safety-strap climbing, and installation and removal of pole line hardware.</td>
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<tr>
<td>ELWT 1106</td>
<td>Prerequisite: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELWT 1106</td>
<td>Corequisite: None</td>
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<tr>
<td>ELWT 1108</td>
<td>Construction of Overhead Structures</td>
<td>3</td>
<td>0/3/0</td>
</tr>
<tr>
<td>ELWT 1108</td>
<td>This course provides the student with the technical understanding and skill necessary to construct overhead high voltage structures. Topics include interpretation of industry specification manuals, identification of overhead hardware, construction techniques and tool use.</td>
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<tr>
<td>ELWT 1108</td>
<td>Prerequisite: None</td>
<td></td>
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<tr>
<td>ELWT 1108</td>
<td>Corequisite: None</td>
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<tr>
<td>ELWT 1110</td>
<td>Line Worker Theory II</td>
<td>4</td>
<td>2/2/0</td>
</tr>
<tr>
<td>ELWT 1110</td>
<td>This course provides the study of the principles of alternating current high voltage distribution circuitry. Included in this course are mathematical computations of AC power, conductor application including practice at armor rodding, hand and pre-formed ties, overvoltage and overcurrent installations, and street lighting circuits.</td>
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<tr>
<td>ELWT 1110</td>
<td>Prerequisite: ELWT1102</td>
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<tr>
<td>ELWT 1110</td>
<td>Corequisite: None</td>
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</table>
EMST 1050 Paramedic Clinical I 1 0/0/1
Corequisite: None

EMST 1060 Emergency Medical System Operations 2 2/0/0
Corequisite: None

EMST 2010 Traumatic Emergencies 2 1/1/0
Corequisite: None

EMST 2040 Paramedic Lab I 2 0/0/2
Corequisite: EMST2020

EMST 2221 Advanced Cardiac Life Support 2 1/1/0
Corequisite: None

EMST 2261 Pediatric Advanced Life Support 2 1/1/0
Corequisite: None

EMST 2271 Prehospital Trauma Life Support 2 1/1/0
Corequisite: None

EMST 2280 Advanced Medical Life Support 2 1/1/0
Corequisite: None

EMST 2292 Paramedic Capstone Experience 2–5
Corequisite: None

ENG 1010 Ethics and the Engineering Profession 3 3/0/0
Corequisite: None

ENG 1096 Reading and Writing Strategies 6 6/0/0
Corequisite: None

ENG 1097 Express English Strategies 3 3/0/0
Corequisite: None

ENG 1098 Accelerated English 3 3/0/0
Corequisite: None

ENG 1101 College Writing 3 3/0/0
Corequisite: None

ENG 1205 Writing About Literature 3 3/0/0
Corequisite: None

ENG 1210 Writing About Current Issues 3 3/0/0
Corequisite: None

ENG 1215 Professional and Technical Writing 3 3/0/0
Corequisite: None

Prerequisite: None
<table>
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<tbody>
<tr>
<td>ENGL 2235</td>
<td>Introduction to Literature: Drama</td>
<td>3</td>
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<tr>
<td>ENGL 2236</td>
<td>Introduction to Literature: Novel</td>
<td>3</td>
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<tr>
<td>ENGL 2237</td>
<td>Introduction to Literature: Short Prose</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>ENGL 2238</td>
<td>Literature, Illness and the Human Condition</td>
<td>3</td>
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<tr>
<td>ENGL 2239</td>
<td>Nature Writers</td>
<td>3</td>
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<tr>
<td>ENGL 2302</td>
<td>American Ethnic Literature</td>
<td>3</td>
<td>3/0/0</td>
</tr>
<tr>
<td>ENGL 2304</td>
<td>Introduction to Literature, Native American Focus</td>
<td>3</td>
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<tr>
<td>ENGL 2310</td>
<td>Introduction to Mythology</td>
<td>3</td>
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<tr>
<td>ENGL 2314</td>
<td>Introduction to Shakespeare</td>
<td>3</td>
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<tr>
<td>ENGL 2321</td>
<td>Women in Literature</td>
<td>3</td>
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<tr>
<td>ENGL 2322</td>
<td>Banned Literature</td>
<td>3</td>
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</table>

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Analysis, critical thinking and synthesis of sources will be covered, along with the development of presentation skills. Coursework also includes a formally documented, multi-source professional project.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Area 6F. The creative writing course focuses on the writing of short fiction, poetry and plays. It is a course designed to offer students practice in the composition of these three modes, with room for exploration of each genre's subcategories. Emphasis will be on writing original work and on learning the skills needed to revise this work in order to achieve a desired response from an audience. This course will emphasize helping students learn to develop their creative voice and incorporate study of published works to aid students in this goal. This course counts as a fine arts course; it places emphasis on the creation of fine arts as opposed to the formal, critical analysis of them.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Area 6F. This creative writing course focuses on the writing of poetry. It is a workshop designed to offer students practice in the composition of poetic modes of writing. Emphasis will be on writing original work and on the skills needed to write successful poetry. The course will emphasize helping students learn to develop their creative voice. This course counts as a fine arts course; it places emphasis on the creation of fine arts as opposed to the formal, critical analysis of them.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Area 6F. This creative writing course focuses on the writing of short fiction. It is a workshop designed to offer students practice in the composition of fiction and other narrative modes of writing. Emphasis will be on writing original work and on the skills needed to write narratives that achieve a desired effect on an audience. The course will emphasize helping students learn to develop their creative voice. This course counts as a fine arts course; it places emphasis on the creation of fine arts as opposed to the formal, critical analysis of them. The course may include analyzing masterpiece models, writing in the genre of short fiction and possibly creative essays, biography, autobiography, and travel writing. Students will present and submit work to the formal, critical analysis of them. Both their own and fellow students' works.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Area 6F. This creative writing course focuses on the writing of memoir. It is a workshop designed to offer students practice in the composition of memoir, from autobiographical vignettes to fully developed personal narratives. Emphasis will be on writing original work as well as reading and critiquing a wide range of memoir. This course counts as a fine arts course; it places emphasis on the creation of fine arts as opposed to the formal, critical analysis of them.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Areas 6F and 7. This course focuses on the writing of personal memoir as well as an in-depth study of the literary genre of memoir; it may also include creative essay writing. It is a workshop designed to offer students practice in the composition of memoir and other narrative modes of writing, as well as a study of the memoir as literature. This course places emphasis on the creation of fine arts as well as the formal, critical analysis of them.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Areas 2, 6 and 10. This course will focus on responding to texts that inspire greater awareness of and appreciation for the environment and that explore environmental challenges. Students will gain experience with critical thinking and reading as they examine perspectives, explore attitudes and analyze current problems/solutions through discussions, writings and other activities.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Areas 2, 6 and 7. This literature course will introduce students to the interdependence of the world through a close study of drama. Studying drama written by various writers around the world will allow students to develop an understanding of and an appreciation for the human condition and culture. The course will also cover the basic elements and concepts of drama.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Areas 2, 6 and 7. This literature course will involve students in a close reading of selected novels that focus on individual and group differences in the United States. Attention will be paid to the traditions and values of the writers and as portrayed in the literature. Basic concepts and elements of the novel also will be studied.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Areas 2, 6 and 8. This literature course will introduce students to the formal, critical analysis of them. The course may include analyzing masterpiece models, writing in the genre of short fiction and possibly creative essays, biography, autobiography, and travel writing. Students will present and submit work to the formal, critical analysis of them. Both their own and fellow students' works.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Area 6. This course introduces students to the study of poetry, drama, memoir and short fiction through the study of Native North American writings. Students will employ critical reading/thinking skills and analytical and creative writing skills in order to more fully understand the literature.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Area 6. This course introduces students to the major myths of Greece and Rome. The course will cover myths, mythological and heroic figures, and how mythology influences culture and literature. The course may also include an introduction to other world mythologies (Norse, Celtic, Native American or others).

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Area 6. This course introduces students to William Shakespeare through the study of a selection of plays and poetry. Focus is placed on making Shakespeare's language accessible, interpreting the works from various contexts, and identifying universal and timeless themes.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Areas 6 and 7. This course examines the ways in which culture, ethnicity, religion, class and sexuality distinguish literature written by female authors from different countries and historical periods. Texts will cover a variety of authors and settings, as well as themes, issues and theories specific to literature written by women.

Prerequisite:
- ENGL 1101 College Writing

Corequisite:
- None

Meets MnTC Goal Area 2, 6 and 7. This course is an in-depth study of literature that has been banned or challenged. The course focuses primarily on the study of literature,
but part of the lectures, discussions and student responses will address the topic of censorship. Students will read from a variety of genres.

**Prerequisite:** ENGL1101

**Corequisite:** None

**ENGL 2323** Horror and Supernatural Fiction 3/3/0

This course meets MnTC Goal Areas 2 and 6. This course is an in-depth study of literary texts that fall under the category of horror and/or supernatural fiction. While the focus is on this genre, the course may also address sub-categories of detective fiction, science fiction and fantasy.

**Prerequisite:** ENGL1101

**Corequisite:** None

**ENGL 2324** Travel Literature 3/3/0

This course meets Goal Areas 2, 6 and 10. This course is an in-depth study of travel literature. This course will, but some readings of early explorers will establish context for the changes within the genre, for example, from medieval pilgrimages and the Victorian Grand Tour to travelogues and road narratives. The course will also address various purposes for travel such as adventure, exploration and spirituality, as well as trends in modern travel writing such as blogs and eco-tourism.

**Prerequisite:** None

**Corequisite:** None

**ENGL 2325** Contemporary World Literature 3/3/0

Meets MnTC Goal Areas 6 and 8. This course provides students an opportunity to read, discuss and analyze contemporary literature from around the world. The focus of the course is on fiction, although students may also be introduced to other contemporary world literature such as poetry, non-fiction and drama.

**Prerequisite:** ENGL1101

**Corequisite:** None

**ENGL 2327** Children's Literature 3/3/0

This course meets MnTC Goal Areas 2, 6 and 7. This course introduces students to children’s literature. Students will read and respond to diverse, traditional and contemporary texts. Emphasis will be placed on reading, analyzing, interpreting and evaluating children's literature from various contextual frameworks, such as the development of the genre, cognitive development, censorship and depictions of family, race and gender.

**Prerequisite:** ENGL1101

**Corequisite:** None

**ENGL 2372** The Poetics of Rock Lyrics 3/3/0

Meets MnTC Goal Areas 2 and 6. This course focuses on the study of poetry and poietic techniques through the lyrics of rock music. Specifically, the course will include studies of artists from the rock “n” roll era (1950s through today).

**Prerequisite:** ENGL1101 AND Or concurrent enrollment

**Corequisite:** None

**ENGR 1100** Project Management 1/1/0

This course provides an overview of the construction industry and introduces the student to the duties and responsibilities of the construction professional. The emphasis of this course will be on the importance of the industry and career possibilities for successful students.

**Prerequisite:** None

**Corequisite:** None

**ENGR 1126** Engineering Graphics 1/1/2

This course introduces and develops basic skills in drawing, lettering, orthographic projection, sections and dimensioning. This course will also apply the basic fundamentals of pictorial drawing, including isometric, oblique, perspective, shade and shadow, and freehand sketching.

**Prerequisite:** None

**Corequisite:** None

**ENGR 1134** Office Systems and Equipment 1/1/2

This course covers the application of Windows software systems in coordination with AutoCAD software as well as general office equipment set-up and use.

**Prerequisite:** None

**Corequisite:** None

**ENGR 2210** Engineering Mechanics I 3/3/0

This course provides an introduction to the principles of mechanics, including equilibrium of particles and rigid bodies; distributed forces, centroids and centers of gravity; moments of inertia of areas; analysis of simple structures and machines; and various types of friction.

**Prerequisite:** MATH1134

**Corequisite:** None

**ENGR 2220** Engineering Mechanics II 3/3/0

This course introduces the theory and application of dynamics of particles and rigid bodies. Topics include the kinematics and kinetics of particles and rigid bodies (translational and rotational), principles of work and energy, and principles of impulse and momentum.

**Prerequisite:** ENGR2210 AND MATH1135

**Corequisite:** None

**ENGR 2230** Mechanics of Materials 3/3/0

This course provides an introduction to the study of stress, strain, deformation and failure of elastic bodies subjected to external forces. Topics include the relationships between the applied loads and the resulting stresses and deformations in an elastic body, stress-strain relations and the design of structural members subjected to known loads.

**Prerequisite:** ENGR2210

**Corequisite:** None

**ENGR 2970** Internship Experience 1--3

This course is designed to provide students with a monitored meaningful work experience related to their field of interest. This experience will increase their employability and enhance their life skills. Completion of this course requires a written report and an evaluation from the student’s supervisor. Each internship is an individualized experience, therefore this course is offered with variable credits. The student may choose from 1, 2 or 3 credits as rearranged with the internship site supervisor and corresponding faculty. Each credit will require a minimum of 45 hours of on the job learning. This course will be graded pass/fail only.

**Prerequisite:** Instructor approval

**Corequisite:** None

**ENGT 1100** Introduction to Building Information Modeling 3/3/0

Building Information Modeling (BIM) is increasingly recognized as a best practice in construction, building design and related disciplines. BIM provides processes and technologies to improve productivity and efficiency in these industries. This course will provide the student an introduction to BIM concepts, terminology and application of best practices.

**Prerequisite:** CAD1000 OR COMM1101 OR Instructor Approval

**Corequisite:** None

**ENGT 1118** Construction and Manufacturing Math 3/3/0

This course covers the application of common geometric and trigonometric calculations related to the construction and manufacturing industries.

**Prerequisite:** MATH0055

**Corequisite:** None

**ENGT 1126** Engineering Graphics 1/1/2

This course introduces and develops basic skills in drawing, lettering, orthographic projection, sections and dimensioning. Students in this course will apply the basic fundamentals of pictorial drawing, including isometric, oblique, perspective, shade and shadow, and freehand sketching.

**Prerequisite:** None

**Corequisite:** None

**ENGT 1134** Office Systems and Equipment 1/1/2

This course covers the application of Windows software systems in coordination with AutoCAD software as well as general office equipment set-up and use.

**Prerequisite:** None

**Corequisite:** None

**ENST 2001** Fundamentals of Utilities 0/0/4

This course provides a general overview of the electric, gas and telecommunications industries. The course will cover fossil fuel and renewable energy sources for electric power generation, its history and projected needs for the future. The course also covers the natural gas utility from the ground to the consumers, its history and projected needs for the future. Also covered are the telecommunications industry and how the land phone and cell phone systems operate.

**Prerequisite:** None

**Corequisite:** None

**ENST 2002** Energy Safety Principles 1/1/0

This course is designed to explore the principles and practices of health and safety in an energy services-related construction environment. Topics covered in this course include personal protective equipment, safe work practices, hazardous materials, employee protection and regulations of the Environmental Protection Agency (EPA), Occupational Safety and Health Act (OSHA) and pertinent safety codes/standards.

**Prerequisite:** None

**Corequisite:** None

**ENST 2222** Blueprint Reading for Energy Industry 2/2/0

This course will introduce students to reading and interpreting system and strand maps for the gas, electric and communication industry. Students will also be introduced to reading building blueprints and staking and pole framing sheets.

**Prerequisite:** None

**Corequisite:** None

**ENST 2223** GPS Mapping 2/1/0

This course covers basic information to help the student understand GPS uses in the utility industries, data collection options, processing the collected data and field procedures used to plan a utility distribution route.

**Prerequisite:** None

**Corequisite:** None

**ENTR 1100** Introduction to Entrepreneurship 3/3/0

This course is designed to introduce students to the entrepreneurial process from conception to birth of a new venture. Students will examine elements in the entrepreneurial process - personal, sociological and environmental - that give birth to a new enterprise. Critical factors for starting a new enterprise such as alternative career prospects, family, friends, role models, the state of the economy and the availability of resources will be explored. Students will be introduced to practical tools they can use to further their careers in business, both in entrepreneurship and in more traditional company environments. This course simulates the experiences that entrepreneurs undergo in conceiving, launching and operating new businesses. The course enables...
students will have hands-on experience working in an operational equine facility including training, boarding, riding and lessons. Students will help with day-to-day care and will share the responsibilities of the horse's health and well-being including feeding, parasite control and medical attention. This advanced section may also include first aid, vaccinations and foaling procedures. The program capstone project, including a business plan, and the program portfolio project will be completed in this course.

Prerequisite: None
Corequisite: None

EQSC 1140 Western Horsemanship

This course will focus on equine judging including conformation, breed characteristics and type and their importance in evaluation. Also covered are performance evaluation, criteria and scoring methods, as well as preparation and delivery of oral reasons.

Prerequisite: None
Corequisite: None

EQSC 1150 Fundamentals of Riding Instruction

The student will learn safety, grooming, handling, tack identification and its uses, tacking, showing techniques, correct body position and riding in western disciplines. A large emphasis will be on horse and rider body communication through balance and coordination.

Prerequisite: None
Corequisite: None

EQSC 1160 English Equitation

The student will learn safety, grooming, handling, tack identification and its uses, tacking, showing techniques, correct body position and riding in hunt seat, dressage and jumping disciplines. A large emphasis will be on horse and rider body communication through balance and coordination.

Prerequisite: None
Corequisite: None

EQSC 1170 Introduction to Horse Training

Students will learn through demonstration how to work with an untrained young horse or an older horse to correct problems and maintain the horse. Training theories, safety, grooming, handling, tacking, identifying tack and its uses, artificial and natural aids and their uses, grooming and showing techniques will also be included.

Prerequisite: None
Corequisite: None

EQSC 1180 Equine Evaluation

This course focuses on equine judging including conformation, breed characteristics and type and their importance in evaluation. Also covered are performance evaluation, criteria and scoring methods, as well as preparation and delivery of oral reasons.

Prerequisite: None
Corequisite: None

EQSC 1190 Farrier Science

This course will introduce the student to the basics of horse handling, hoof and leg anatomy and physiology from a farrier's perspective. The course will include theory and demonstrations of proper trimming and shoeing. The student will demonstrate correct trimming and shoeing on cadaver feet. The concept of corrective farrier work will also be introduced and demonstrated.

Prerequisite: None
Corequisite: None

EQSC 1200 Equine Events Management

This course provides an experience in the planning, marketing, facility preparation and horse show management necessary to run a successful nationally sanctioned equine event. In partnership with the Red Horse Ranch Arena, students will be involved in all aspects of hosting a selection of breed, cutting, reining and barrel racing shows throughout the semester. This will include all aspects of planning and marketing an equine event, recordkeeping, facility preparation, set-up and tear-down, and day-of-show management. This course is repeatable for credit.

Prerequisite: None
Corequisite: None

EQSC 2200 Recognition and Management of Equine Disorders

This course will cover the practical aspects of recognizing and managing equine infectious and metabolic disease, lameness and performance problems and breeding issues. Vaccination protocols and parasite prevention will be included. This course will build on the knowledge gained in EQSC 1050 and 1060 and be custom fitted to each student's specific discipline relevant to his or her internship site.

Prerequisite: EQSC1050 AND EQSC1060
Corequisite: None

EQSC 2300 Applied Stable Operations

This course will build on the knowledge from EQSC 1130 and 1131. Caring for horses, their environment, nutrition including feeds and feeding, behavior and disease management within a holistic stable/farm/ranch environment will be explored and analyzed. The course will be customized to be relevant to the student's internship experience and will include a capstone project consisting of an in-depth analysis and evaluation of the student’s internship facility and business.

Prerequisite: EQSC1130 AND EQSC1131
Corequisite: None

EQSC 2501 Equine Internship

This course will provide the student practical experience and on-the-job training relevant to the equine industry. The internships will take place at sites throughout the country or...
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<td>FIRE 1100 Introduction to Fire Service</td>
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**Course Descriptions**

**FIRE 1100 Introduction to Fire Service**
This course covers the basic information that the student will need to understand the fire protection career field. It will provide an overview of the firefighter selection process and assist in preparing the student for the competitive selection process. It will also provide additional information on fire protection careers other than firefighter. This course will cover the history of public fire protection; basic terminology; the chemistry, physics and behavior of fire; fire suppression; fire-based emergency medical services; hazardous materials response; fire prevention; and physical fitness training requirements. 

**FIRE 1106 Firefighter I and II**
This course covers the objectives of the Minnesota State Fire Chiefs Association (MSFCA) for certification as a Firefighter I and Firefighter II. The MSFCA objectives are based on the National Fire Protection Association’s (NFPA) 1001: Standard for Fire Fighter Professional Qualifications. This will prepare the student to function at or above the minimum level of training for entry into a fire protection career field.

**FIRE 1108 Firefighter I and II Skills**
This course covers the objectives of the Minnesota State Fire Chiefs Association (MNFCA) for certification as a Firefighter I and II. The MNFCA objectives are based on the National Fire Protection Association (NFPA) 1001 Standard for Fire Fighter Professional Qualifications. This will prepare the student to function at or above the minimum level of training for entry into a fire protection career field.

**FIRE 1130 Technical Rescue**
This course will cover the basic technical rescue techniques required from National Fire Protection Association (NFPA) 1670, Standard on Operations and Training for Technical Search and Rescue Incidents.

**FIRE 1140 Fire Inspection and Code Enforcement**
This course will cover basic fire inspection practices based on National Fire Protection Association (NFPA) 1031, Standards for Professional Qualifications for Fire Inspectors and Plan Examiners.

**FIRE 1150 HazMat Operational**
This course is designed to teach the necessary skills to protect yourself, your fellow responder and the public from exposure in a hazardous materials incident. The course meets the requirements of the OSHA (Occupational Safety and Health Administration) 1910.120 for the First Responder Operational level. The student will learn how to recognize and identify the presence of hazardous materials, the proper protective clothing to use, how to decontaminate properly, how to establish an Incident Command System and the proper standard operating procedures to maintain safety at the incident scene. The course follows the NFPA (National Fire Protection Association) Standard 472 requirements for the First Responder Operational level.

**FIRE 1152 Building Construction**
This course will cover basic building construction techniques. It will also address safety features of today’s buildings in relation to firefighter safety, fire behavior and building behavior when subjected to fire conditions.

**FIRE 2020 Fire and Emergency Services Administration**
This course introduces the student to the organization and management of a fire and emergency services department and the relationship of the government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics and leadership from the perspective of the company officer as described in the National Fire Protection Association’s (NFPA) 1021 Fire Officer Professional Qualifications 2009 Edition for state certification for Fire Officer I and Fire Officer II.

**Prerequisite:** None
**Corequisite:** None

**FIRE 2030 Fire Instructor I**
This course introduces students to the various objectives of the National Fire Protection Association (NFPA) 1041 Fire Service Instructor Professional Qualifications 2009 Edition for state certification for Fire Instructor I. This will prepare the student to function at the minimum level of training for a fire service instructor.

**Prerequisite:** None
**Corequisite:** None

**FIRE 2040 Fire Protection Systems**
This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

**Prerequisite:** None
**Corequisite:** None

**FIRE 2050 Fire Prevention**
This course provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation.

**Prerequisite:** None
**Corequisite:** None

**FIRE 2060 Strategy and Tactics**
This course will explore the skills necessary to function as a supervisor within a tight-knit team, such as an entry level fire department. The course will focus on leadership, planning, mission critical decision making, organizational behavior, change management, performance evaluations, and personal leadership styles.

**Prerequisite:** None
**Corequisite:** None

**FNC 1110 Introduction to Financial Services**
This course covers the history of banking, bank organizational structure, the Federal Reserve System and the types of services provided by financial institutions. Deposit, loan and consumer services will be emphasized. Topics include checking accounts, savings accounts, credit cards, electronic funds transfer, loan products, loan processing, trusts, and consumer services.

**Prerequisite:** None
**Corequisite:** None

**FNC 1111 Introduction to Financial Services**
This course covers the history of banking, bank organizational structure, the Federal Reserve System and the types of services provided by financial institutions. Deposit, loan and consumer services will be emphasized. Topics include checking accounts, savings accounts, credit cards, electronic funds transfer, loan products, loan processing, trusts, bank profitability, deregulation and safety of bank funds. This course also gives attention to the industry’s concern about customer service, sales, marketing and competition.

**Prerequisite:** None
**Corequisite:** None

**FNC 2221 Real Estate Lending**
This course covers the fundamental procedures used by mortgage lenders and support staff in providing loans to homeowners. The student will prepare real estate financing applications, appraisals, truth in lending forms, disclosure settlement statements, etc.
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<tr>
<td>GAS 2002</td>
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Collateral releases and other supporting credit documentation. Topics include mortgage types, FHA/VA/conventional financing, second mortgages, loan documentation, title insurance, foreclosure and appraisals.

**Course Descriptions**

**FYE 1000 Student Success Seminar**
This course is designed as an introductory seminar in which students will have the opportunity to explore the overall building blocks for success in college and in life. This seminar seeks to promote understanding that the journey of college is a time of personal growth and change and begins with the identification and clarification of values and goals. This course is available to students in their first term.

**Corequisite:** Instructor approval required.

**FYE 1101 First Year Experience**
This course is designed to help M State students strengthen and develop critical and creative thinking skills associated with a college academic experience, make social adaptations to a new environment and make connections with faculty, staff and resource offices. Topics include an understanding of individual risks and barriers, multiculturalism, life and career planning and personal responsibility. This course is also designed to help students develop the basic skills necessary for academic success in college. Additional topics to be discussed may include but are not limited to time management, study skills, note- and test-taking skills, motivation, and community and campus resources.

**Prerequisite:** None

**Corequisite:** None

**GAS 1000 Gas Utility Field Training I**
This is an introductory laboratory course that prepares students for basic field utility work, including safety procedures and equipment operation. This course focuses on hands-on application and is intended to help students become confident in safely operating basic gas utility equipment.

**Prerequisite:** None

**Corequisite:** None

**GAS 1001 Underground Utility Locating**
This course provides the skills and procedures necessary to locate and accurately mark underground utilities.

**Prerequisite:** None

**Corequisite:** None

**GAS 1002 Gas Service Welding I**
This course provides an opportunity for students to develop the knowledge, skills and understanding required for employment in this field. Students will learn how to weld pipe utilizing oxyacetylene and gas metal arc welding, welding safety, weld faults and causes, weld joint design and fit up.

**Prerequisite:** None

**Corequisite:** None

**GAS 1003 Gas Utility Equipment Training**
This is an introductory course that prepares students for basic field utility work. The course includes safety procedures, equipment operations and maintenance.

**Prerequisite:** None

**Corequisite:** None

**GAS 1004 Gas Utility Field Training II**
This course provides practice in applied gas utilities tasks with a focus on installation. Students have theory and applied training with the installation of gas meters, valves, regulators and plastic pipe.

**Prerequisite:** GAS1000

**Corequisite:** None

**GAS 1005 Gas Service Welding II**
This course provides an opportunity for students to develop the knowledge, skills and understanding required for employment in this field. Students will understand how to position pipe welding utilizing gas metal arc welding and shielded metal arc welding processes, pipe fit up and pipe weld testing according to American Petroleum Institute (API) Standard 1104 code.

**Prerequisite:** GAS1002

**Corequisite:** None

**GAS 1500 Metallurgy**
This course provides students with knowledge of the manufacturing of iron and steel, mechanical and physical properties of metals, metal identification, macro and microscopic grain structures, welding metallurgy, applied heat treating processes, and weld failures and fractures.

**Prerequisite:** None

**Corequisite:** None

**GAS 2001 Forklift Certification**
This course offers an Occupational Safety and Health Administration-compliant program consisting of field training, a knowledge test and a hands-on evaluation for all forklift operations.

**Prerequisite:** None

**Corequisite:** None

**GAS 2002 Gas Utility Field Training III**
This course provides practice in gas utility tasks with a focus on gas mains. The students have theory and applied training with the installation and repair of steel gas mains and services, line testing and leak detection procedures.

**Prerequisite:** None

**Corequisite:** None

**GAS 2003 Gasless Leak Detection**
This course will provide hands-on training for responding to gas emergencies and conducting hazardous leak investigations.

**Prerequisite:** None

**Corequisite:** None

**GAS 2600 Electric and Gas Appliances**
This course provides the student with the skills necessary for the installation, maintenance and repair of residential electric/gas appliances.

**Prerequisite:** None

**Corequisite:** None

**GDTC 1100 Macintosh Production Processes**
This course covers general processes, workflow methods and utilization of the Macintosh Operating System features in a graphic design or production environment.

**Prerequisite:** None

**Corequisite:** None

**GDTC 1105 Adobe Photoshop I**
This course covers the fundamental functions of Adobe Photoshop to manipulate and combine digital images.

**Prerequisite:** None

**Corequisite:** None

**GDTC 1113 Design and Layout I**
As the first of three layout courses in a series, this course introduces students to the basic elements and principles of design. Students will produce a variety of projects that will familiarize them with basic design theories, branding philosophies and production techniques. In addition to hand-rendered projects, students will also begin to learn technical layout skills in Adobe InDesign.

**Prerequisite:** None

**Corequisite:** None

**GDTC 1115 Design and Layout II**
As the second of three layout courses in a series, students will expand upon their basic design knowledge by learning advanced methods of style, typogaphy, layout grids, identity development and branding. Increasingly complex projects will require students to employ more sophisticated methods of research, concept development, design strategy and assessment. Students will create a variety of projects in Adobe software.

**Prerequisite:** None

**Corequisite:** None

**GDTC 1124 Interactive Design I**
This course focuses on design principles and technical specifications for interface design using digital imaging software, hypertext markup language and cascading style sheets to create and edit interactive and multimedia projects.

**Prerequisite:** GDTC2278 AND GDTC2244

**Corequisite:** None

**GDTC 1126 Digital Photography**
In this course students will develop basic photographic skills and knowledge using a digital camera for a variety of assignments.

**Prerequisite:** None

**Corequisite:** None

**GDTC 1134 Electronic Drawing I**
This course covers fundamental functions of Adobe Illustrator or other vector-based equivalent instructor-designated software to create basic illustrations and layout.

**Prerequisite:** None

**Corequisite:** None

**GDTC 1135 Adobe Illustrator I**
This course covers fundamental functions of Adobe Illustrator to create basic illustrations and layout.

**Prerequisite:** None

**Corequisite:** None

**GDTC 1144 Electronic Drawing II**
This course covers the use of Adobe Illustrator or equivalent instructor-designated vector-based software using the Macintosh computer to create and manipulate electronic illustrations, logos and artwork.

**Prerequisite:** GDTC1134

**Corequisite:** None

**GDTC 1150 Process Printing Theory**
This course provides foundational theory on print process as well as printing terminology. Focus is on theory and not on application of technology, using books, lectures and industry tours, if available.

**Prerequisite:** None

**Corequisite:** None

**GDTC 2203 Electronic Image Manipulation**
This course covers the fundamental functions of Adobe Photoshop or other raster-based equivalent software to manipulate and combine digital images.

**Prerequisite:** None

**Corequisite:** None
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**Course Descriptions**

**GDTC 2205 Adobe Photoshop II**
This course covers digital image creation, manipulation and preparation for output using a variety of advanced functionality Adobe Photoshop.

**Prerequisite:** GDTC2203

**Corequisite:** None

**GDTC 2212 Design and Layout III**
As the third of three layout courses in a series, this course focuses on brand and identity development. Students will develop interactive graphics for web applications and design visual identity and supporting brand materials. Additional applications of these concepts are explored in the form of self-promotional projects. Special emphasis is placed on research, market positioning, techniques, rationale and presentation.

**Prerequisite:** GDTC113 AND GDTC115

**Corequisite:** None

**GDTC 2214 Integrated Graphic Design**
This course focuses on the advanced integration of Adobe software technology and graphic design application. Coursework will include a continuation of brand development and design of grid systems, advanced typographic application, color theory application and development of written and verbal design rationale.

**Prerequisite:** GDTC2278 AND GDTC2244

**Corequisite:** None

**GDTC 2238 Design Studio**
Students will produce design projects with content and media of their particular interest. Work will be completed on a contractual basis between the student and instructor. Additional projects and activities will be assigned to gain experience in industry and client processes. Specific emphasis will be placed on refining skills and producing professional-level projects for student portfolios.

**Prerequisite:** GDTC2203 AND GDTC2242 AND GDTC2212

**Corequisite:** None

**GDTC 2240 Lighting Techniques**
In this course, students will develop an understanding of natural and indoor lighting. They will also demonstrate the capabilities of flash-mount lighting; demonstrate their ability to effectively use multiple flash functions, settings and techniques; and demonstrate proper use and settings of strobe lighting components. Students will also learn how to use settings for box and umbrella lighting techniques, critique lighting methods used in different venues and demonstrate soft box lighting techniques for product photography.

**Prerequisite:** None

**Corequisite:** None

**GDTC 2244 Advanced Electronic Imaging**
This course covers digital image creation, manipulation and preparation for output using a variety of advanced functionality Adobe Photoshop or equivalent instructor-designated raster-based software.

**Prerequisite:** GDTC2203

**Corequisite:** None

**GDTC 2245 Adobe Illustrator II**
This course covers the use of Adobe Illustrator to create and manipulate electronic illustrations, logos and artwork.

**Prerequisite:** GDTC113

**Corequisite:** None

**GDTC 2246 Advanced Photography and Imaging**
In this course, students will learn how to photograph in Raw File Format and develop a clear understanding of the different computer file formats, file sizes, resolution, pixels per inch (PPi) and megapixels. They will also demonstrate color correction; red, green, blue (RGB), cyan, magenta, yellow and black (CMYK). Students will identify CMYK profiles, understand of the different computer file formats, file sizes, resolution, pixels per inch (PPI) and mega pixels. They will also demonstrate color correction; red, green, blue (RGB), cyan, magenta, yellow and black (CMYK).

**Prerequisite:** GDTC1126

**Corequisite:** None

**GDTC 2258 Graphic Design Professional Practices**
This course addresses the professional practice of graphic design technology. The course will cover interviewing skills, presentation techniques, freelance business operation, proposals and management, resume and cover-letter writing, job research/job offer and portfolio preparation.

**Prerequisite:** GDTC2212 AND GDTC2278

**Corequisite:** None

**GDTC 2276 Graphic Design Internship**
Students are placed temporarily in a partnering graphic industry establishment where they are able to utilize their graphic design technology skills in a real-world experience.

**Prerequisite:** GDTC2203 AND GDTC2212

**Corequisite:** None
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
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</thead>
<tbody>
<tr>
<td>GOLF 2202</td>
<td>Introduction to Golf Landscape and Horticulture</td>
<td>3</td>
<td>2/1/0</td>
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<td>GOLF 2402</td>
<td>Golf Internship</td>
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<tr>
<td>HIST 1000</td>
<td>Healthcare Core Curriculum</td>
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<tr>
<td>HIST 1001</td>
<td>Nursing Assistant Skill Set</td>
<td>2</td>
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<tr>
<td>HEAT 2218</td>
<td>Gas Heating</td>
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<tr>
<td>HEAT 2220</td>
<td>Oil Heating</td>
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<tr>
<td>HIST 1110</td>
<td>Western Civilization: Ancient-1400's</td>
<td>3</td>
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<tr>
<td>HIST 1111</td>
<td>Western Civilization: 1400's-1600's</td>
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<tr>
<td>HIST 1112</td>
<td>Western Civilization: 1600's-1800's</td>
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<tr>
<td>HIST 1113</td>
<td>Western Civilization: 20th Century</td>
<td>3</td>
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<tr>
<td>HIST 1500</td>
<td>European Experience</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>HIST 1600</td>
<td>History of Baseball</td>
<td>3</td>
<td>3/0/0</td>
</tr>
<tr>
<td>HIST 2211</td>
<td>American History: the Colonial Period</td>
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<td>3/0/0</td>
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<tr>
<td>HIST 2212</td>
<td>American History 19th Century</td>
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<td>3/0/0</td>
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<tr>
<td>HIST 2220</td>
<td>Minnesota and Northern Plains History</td>
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<tr>
<td>HITM 1150</td>
<td>Introduction to Health Care Delivery</td>
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<tr>
<td>HITM 1152</td>
<td>Health Information Systems</td>
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<tr>
<td>HITM 1153</td>
<td>Introduction to Electronic Health Records</td>
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</table>

**COURSE DESCRIPTIONS**

**GOLF 2202 Introduction to Golf Landscape and Horticulture (3, 2/1/0)**
This course introduces students to the industry of golf management, golf course landscape and horticulture. Students will also be introduced to the use, production and maintenance of ornamental plants. The course exposes students to regional golf landscape and garden center industries through lectures, field trips and guest speakers. 

**Prerequisite:** None

**HIST 1000 Healthcare Core Curriculum (4, 4/0/0)**
The Healthcare Core Curriculum is a standardized 64-hour competency-based course introducing students to health care careers. The course includes basic knowledge health care workers need in order to contribute to the delivery of safe and effective care in rapidly changing health care environments. Students who take the Nursing Assistant Skill Set concurrently will be prepared to take the nursing assistant certification examination.

**Prerequisite:** None

**Corequisite:** None

**HIST 1001 Nursing Assistant Skill Set (2, 0/2/0)**
This laboratory and clinical course is to be taken concurrently with the HCC1000 Healthcare Core Curriculum course for students interested in taking the nursing assistant certification examination. This course provides students the laboratory and clinical hours required for the nursing assistant curriculum. The course may not be taken independently of the HCC1000 Healthcare Core Curriculum course.

**Prerequisite:** Clear Minnesota Department of Health criminal background check AND Demonstration of required immunizations

**Corequisite:** HCC1000

**HEAT 2218 Gas Heating (2, 1/1/0)**
This course covers gas heating units, primarily furnaces. Emphasis is placed on understanding the operating systems and the operating sequence as it exists within the furnace, including mechanical, electrical and combustion. Diagnosis and repair of malfunctioning furnaces is a significant portion of this course.

**Prerequisite:** None

**Corequisite:** None

**HEAT 2220 Oil Heating (2, 1/1/0)**
This course covers the use of oil as a means used to heat various media including air and water.

**Prerequisite:** CONE1102 and PLBG1128

**Corequisite:** None

**HIST 1110 Western Civilization: Ancient-1400's (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 8. This course provides a discussion of the political, economic, cultural and social factors which have shaped the history of the Western world. Topics include Mesopotamia, the Hebrews, the Greeks, the Romans, the rise of Christianity, feudalism and manorialism, the rise of Islam, the Merovingians and the Carolingians.

**Prerequisite:** None

**Corequisite:** None

**HIST 1111 Western Civilization: 1400's-1600's (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 8. This course provides a discussion of the political, economic, cultural and social factors which have shaped the history of the Western world. Topics include the Renaissance, the rise of capitalism, the Reformation, the emergence of nation states and the Age of Absolutism.

**Prerequisite:** None

**Corequisite:** None

**HIST 1112 Western Civilization: 1600's-1800's (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 8. This course provides a discussion of the political, economic, cultural and social factors which have shaped the history of the Western world. Topics include the English Revolution, the Intellectual Revolution, the French Revolution and the Industrial Revolution.

**Prerequisite:** None

**Corequisite:** None

**HIST 1113 Western Civilization: 20th Century (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 8. This course provides a discussion of the political, economic, cultural and social factors which have shaped the history of the Western world. Topics include Marxism, the Industrial Revolution, the Age of Progress, World War I, the rise of fascism, World War II and the Cold War.

**Prerequisite:** None

**Corequisite:** None

**HIST 1500 European Experience (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 8. This course combines an on-campus component with a trip to Europe. During the on-campus portion of the course students will learn about major events in British and French history such as the French Revolution, the Napoleonic era, the War of the Roses and the reign of Henry VIII. After the on-campus component is completed, students embark on a 10-day trip to Paris and London, where they visit historical sites they studied during the on-campus portion of the course.

**Prerequisite:** None

**Corequisite:** None

**HIST 1600 History of Baseball (3, 3/0/0)**
Meets MnTC Goal Area 5. This course deals with the history of baseball in America. The course chronicles the origin of baseball, the development of professional baseball, the creation of baseball leagues, the business of baseball, baseball scandals, labor relations, great moments in baseball history, baseball curses and the steroids era. The course not only examines the history of the game itself, but also emphasizes the ways in which baseball has shaped American society and American society has shaped baseball.

**Prerequisite:** None

**Corequisite:** None

**HIST 2211 American History: the Colonial Period (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 7. The course content is the colonial period in American history. Topics include the Age of Exploration, early American settlements, the rise of colonial regions in America, the clash of cultures and races, the American Revolution and the Articles of Confederation.

**Prerequisite:** None

**Corequisite:** None

**HIST 2212 American History 19th Century (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 7. This is the second course in an American history sequence. The course content is America's 19th century, defined as the 1870s to 1877. Consideration is given to the Constitution of 1877, the Washington administration, Jeffersonian policies, the War of 1812, the slavery controversy, the Civil War and Reconstruction.

**Prerequisite:** None

**Corequisite:** None

**HIST 2213 American History: 20th Century (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 7. This course covers the history of the United States during the 20th century. Topics will include the Progressive Era, World War I, the Roaring 20s, the Great Depression, the New Deal, World War II, the Cold War, the Korean Conflict, scientific advancements of the 1950s and 1960s, the Civil Rights Movement, the Cuban missile crisis, the Vietnam War and Watergate.

**Prerequisite:** None

**Corequisite:** None

**HIST 2220 Minnesota and Northern Plains History (3, 3/0/0)**
Meets MnTC Goal Areas 5 and 10. This survey course explores the cultural, social, political and economic development of Minnesota and the northern Great Plains. Topics will include geography and natural resources, relations with Native American and Native European populations, and key events in the economic and political development of the region. Emphasis will be placed on the interaction between human development and the natural environment.

**Prerequisite:** None

**Corequisite:** None

**HITM 1150 Introduction to Health Care Delivery (3, 3/0/0)**
This course is a study of the historical development of the health care delivery system. The student is given an opportunity to learn about the role of the health information professional and how this role is integrated into the health care delivery system. Ethical standards in health information management are covered.

**Prerequisite:** None

**Corequisite:** None

**HITM 1152 Health Information Systems (1, 2/0)**
This course is a study of the basic health information systems, both paper-based and electronic, with an emphasis on electronic. Primary and secondary records will be defined. Other areas to be covered are basic documentation requirements and the management of paper records. An introduction to classification systems, taxonomies, nomenclatures, terminologies and clinical vocabularies is provided. An electronic health record (EHR) educational system is used extensively in this course as a foundation for EHR utilization throughout a health care organization.

**Prerequisite:** None

**Corequisite:** HITM1150

**HITM 1153 Introduction to Electronic Health Records (1, 1/0)**
This course introduces the student to the evolution of paper health records to the electronic version. The stages of preparation of electronic health record development will be identified. Students will be given the opportunity to research the technologies that support the electronic health record. Also, the challenges of electronic health record implementation will be discussed.

**Prerequisite:** Permission of instructor.

**Corequisite:** None
<table>
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<th>CR</th>
<th>Lec/Lab/OIT</th>
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<td>Medialcodes Aspects</td>
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<td>HITM 1159</td>
<td>Professional Practice Functions</td>
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<tr>
<td>HITM 1160</td>
<td>Health Information Systems and Statistics</td>
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<td>HITM 2202</td>
<td>Computer Applications in Healthcare</td>
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<tr>
<td>HITM 2204</td>
<td>Fundamentals of Electronic Health Records</td>
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<td>1/2/0</td>
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<td>HITM 2211</td>
<td>Basic Pharmacology for Coders</td>
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<tr>
<td>HITM 2214</td>
<td>Introduction to International Classification of Diseases (ICD) Coding</td>
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<td>2/1/0</td>
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<tr>
<td>HITM 2216</td>
<td>Introduction to Procedure Coding</td>
<td>3</td>
<td>1/2/0</td>
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<tr>
<td>HITM 2218</td>
<td>Intermediate Procedure Coding</td>
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<tr>
<td>HITM 2230</td>
<td>Medical Science for Health Information Professionals</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>HITM 2236</td>
<td>Advanced International Classification of Diseases (ICD) Coding</td>
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<td>1/1/0</td>
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<tr>
<td>HITM 2238</td>
<td>Advanced Coding CPT</td>
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<td>1/1/0</td>
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<tr>
<td>HITM 2250</td>
<td>Supervisory Leadership in Health</td>
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<td>3/0/0</td>
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<tr>
<td>HITM 2252</td>
<td>Quality Management &amp; Statistics</td>
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<td>2/1/0</td>
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<td>Quality Management Studies</td>
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<tr>
<td>HITM 2257</td>
<td>Reimbursement Systems</td>
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<td>HITM 2260</td>
<td>Professional Practice Experience Management</td>
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<td>HITM 2275</td>
<td>Health Record Documentation</td>
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<tr>
<td>HITM 2280</td>
<td>Registered Health Information Technology Exam Review</td>
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<tr>
<td>HITM 2282</td>
<td>Introduction to Diagnosis Coding</td>
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<tr>
<td>HLTH1112</td>
<td>Nursing Assistant-Home Health Aide</td>
<td>4</td>
<td>2/0</td>
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<tr>
<td></td>
<td>This course provides introductory training for those who want to work as a nursing assistant-home health aide. It introduces the concepts of infection control, safe and clean environment, communication, lifespan issues, basic human care needs, home care services, goals and responsibilities of a nursing assistant/home health aide, food and meal management, nutrition, basic emergency care procedures, documentation and reporting, ethics and confidentiality, and homemaking skills. The primary focus is basic nursing care and the skills needed to safely and competently perform personal holistic care under the supervision of a registered nurse. This course meets the requirements for the Minnesota Department of Health Nursing Assistant/Home Health Aide course, and students who successfully complete the course are eligible to take the State Registry Exam for Nursing Assistant/Home Health Aide.</td>
<td>None</td>
<td>Corequisite: None</td>
</tr>
<tr>
<td>HLTH1122</td>
<td>CPR-First Aid</td>
<td>1</td>
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<tr>
<td></td>
<td>This course teaches basic life support using American Heart Association or American Red Cross guidelines and first aid using American Academy of Orthopaedic Surgeons(AAOS) or American Red Cross guidelines.</td>
<td>None</td>
<td>Corequisite: None</td>
</tr>
<tr>
<td>HLTH1130</td>
<td>Transcultural Health Concepts</td>
<td>1</td>
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<td>This course will provide students with the opportunity to examine their own values, beliefs, attitudes and behaviors and to integrate this analysis in understanding cultural awareness while recognizing the significance that culture has on health beliefs and practices. This course may include guest lecturers, small discussions, videos, student presentations covering concepts across the continuum from cultural awareness to culturally competent care in relationship to providing holistic health care to a diverse group of patients. While this course has an emphasis on health care, other disciplines could apply cultural awareness with diverse populations in a variety of settings.</td>
<td>None</td>
<td>Corequisite: None</td>
</tr>
<tr>
<td>HLTH1201</td>
<td>Introduction to Mental Health Behavioral Aide</td>
<td>4</td>
<td>4/0/0</td>
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<tr>
<td></td>
<td>This course will provide students with resources to enter practice as a Mental Health Behavioral Aide with a focus on children with mental illnesses. Students will develop entry-level competencies in providing skill-building in peer-to-peer or parent-child interactions, performing as a role-play partner, reinforcing children's accomplishments, generalizing skill-building activities in children's multiple natural settings, and helping families to develop redirection and de-escalation skills. The aid will perform these duties under the supervision of a mental health practitioner.</td>
<td>None</td>
<td>Corequisite: None</td>
</tr>
<tr>
<td>HLTH2100</td>
<td>Wellness for Athletic Performance</td>
<td>3</td>
<td>3/0/0</td>
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<td>This course is designed to introduce the student to nutrition in relation to health and community wellness. Topics may include drug testing, hydration, fuel activation, eating disorders and the female athlete triad. There will be an emphasis on exploring the benefits and risks of sports supplements (legal and illegal).</td>
<td>None</td>
<td>Corequisite: None</td>
</tr>
<tr>
<td>HLTH2212</td>
<td>Social Seminar Drug Education</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td></td>
<td>This course is designed to cover the use, abuse and dependency of legal and illicit drugs. Included are the physical and psychological effects and the problems related to drug use. It may include guest lecturers, small discussions, videos, student presentations covering topics related to all forms of drugs and drug use including intervention, and available sources to help deal with drug abuse.</td>
<td>None</td>
<td>Corequisite: None</td>
</tr>
<tr>
<td>HLTH2213</td>
<td>Emergency Responder</td>
<td>3</td>
<td>2.5/0.5/0</td>
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<td></td>
<td>The first responder-level course covers regular and more advanced first aid practices and procedures including extrication and transportation, professional-level CPR, oxygen administration, long bone splinting, blood pressure monitoring, emergency childbirth, patient assessment, backboarding and stress management.</td>
<td>None</td>
<td>Corequisite: None</td>
</tr>
<tr>
<td>HLTH2215</td>
<td>EMT Basic</td>
<td>6</td>
<td>4/2/0</td>
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<td>This course follows the current National Standard Curriculum and will include all skills and classroom information necessary to provide emergency care at the basic life support level. Modules presented include preparation of the EMT-B, airway, patient assessment (medical and trauma), medical/behavioral emergencies and OB/GYN, trauma, infants and children, ambulance operations and interventions (medications and semi-automatic defibrillation). Upon successful completion of the EMT-B course, the student will be eligible to take the state/national registry computer and practical examinations.</td>
<td>None</td>
<td>Corequisite: None</td>
</tr>
</tbody>
</table>

**Course Descriptions**

Tabular list for diagnosis code assignment according to current coding conventions and guidelines. Students will interpret clinical information found in the health record in order to assign diagnosis codes while maintaining ethical coding standards.

**Prerequisite:** HLTH1116 AND BIOL2260

**Corequisite:** None

**HLTH2283 Intermediate Diagnosis Coding**

This course is a continuation of coding guidelines using the current International Classification for Diseases. Students will practice assigning diagnosis codes to clinical information found in a health record while maintaining ethical coding standards. Current regulations and guidelines in code assignment will be covered. A Web-based coding system is introduced and utilized in diagnostic code assignment.

**Prerequisite:** HLTH2282

**Corequisite:** None

**HLTH2284 Advanced International Classification of Diseases, Tenth Edition**

This course is a continuation of the in-depth study of the International Classification of Diseases, 10th Edition. It may meet the requirements of the Minnesota Department of Health Nursing Assistant/Home Health Aide course, and students who successfully complete the course are eligible to take the State Registry Exam for Nursing Assistant/Home Health Aide.

**Prerequisite:** None

**Corequisite:** None

**HLTH2290 Health Care Data Management and Analysis**

This course provides an overview of enterprise-wide information management and governance and the use of statistics and manipulation of data in the health care setting. A hands-on approach uses real-world examples showing students how to identify the problem, find the right data, generate the statistics and present the information to other users. Students learn how the quality of data and its management affect the sustainability and viability of health care organizations.

**Prerequisite:** HLTH2204

**Corequisite:** None

**HLTH1100 Introduction to Nutrition**

This course is designed to introduce the student to the science of nutrition and the study of food nutrients and other substances, their action, interaction and balance. Special emphasis is placed on the interrelationship between diet, nutrition, health and disease.

**Prerequisite:** None

**Corequisite:** None

**HLTH1110 Introduction to Anatomy and Physiology**

This course is an introduction to the structure and function of the human body. Focus will be on the study of each individual organ system and the interaction of each system with the rest of the body.

**Prerequisite:** None

**Corequisite:** None

**HLTH1111 Personal and Community Health**

This course studies the dimensions of wellness and how each dimension is affected by personal health choices. It also studies how the personal choices of society affect the community. This course is designed to help the student maintain good physical, mental and social well-being. Some of the topics covered include anatomy and physiology, emotional and mental health, drug use and abuse, and nutrition and fitness. We will examine the impact of communities in providing access to personal health choices and health care, and how as a society we restrict personal health choices socioeconomically, racially and by gender.

**Prerequisite:** None

**Corequisite:** None

**HLTH1112 Introduction to Home Health**

This course builds on the nursing assistant course to introduce the concepts of home health services and the goals and responsibilities of a home health aide. Topics of food and meal management, nutrition, basic emergency care procedures, documentation and reporting, ethics and confidentiality, and homemaking skills make up the foundation of this course. Care needs of special populations such as chemically dependent, developmentally delayed, pediatrics and the handicapped are also discussed within this course. This course meets the requirements of the Minnesota Department of Health Home Health Aide course, and successful completion makes the student eligible to take the State Nursing Assistant/Home Health Aide registry exam.

**Prerequisite:** HLTH1115

**Corequisite:** None

**HLTH1115 Introduction to Nursing in Long Term Care**

This course provides an introduction to the concepts of infection control, safe and clean environment, communication, lifespan issues, basic human care needs and special population care needs. The primary focus is on basic nursing care and the skills needed to safely and competently perform personal holistic care under the supervision of a registered nurse to clients in long-term and acute-care settings. It meets the requirements for the Minnesota Department of Health Nursing Assistant course, and successful completion allows the student to be eligible to take the State Registry Exam for Nursing Assistant.

**Prerequisite:** None

**Corequisite:** None

**HLTH1116 Medical Terminology**

This course covers prefixes, suffixes and root words used to compose medical terms. The student learns to spell and pronounce, define, analyze and formulate terminology related to body structure, disease, diagnosis and treatment. Medical abbreviations are also included.

**Prerequisite:** None

**Corequisite:** None

**HONS 1101 Introduction to Honors**

Meets MnTC Goal Area 2. This course is intended to be taken by students within the Honors Program during the first semester of the program.

This is a variable content
reading course which will emphasize critical thinking but be directed toward the academic interests of faculty and students. Each student will present a proposal for a capstone honors project at the end of the course.

Prerequisite: None

Corequisite: None

HONS 2900 Honors Capstone Seminar 1 1/0/0

Meets MnTC Goal Area 2. This course is intended to be taken by students within the Honors Program during the final semester of the program. The course is a variable content reading course which will emphasize critical thinking but be directed toward the academic interests of faculty and students. Each student will present a capstone honors project at the end of the course.

Prerequisite: None

Corequisite: None

HRES 1122 Human Resource Management 3 3/0/0

This course covers an introduction to the basic principles of human resource functions and services. It provides a background and understanding for further human resource courses.

Prerequisite: None

Corequisite: None

HRES 1126 Employee Processes 3 3/0/0

This course covers basic knowledge of the factors to be considered and the strategies used in the employment process. Topics included in this course include job analysis, job description, job postings, employment ads and interviewing.

Prerequisite: None

Corequisite: None

HRES 1130 Benefits Administration 3 3/0/0

This course covers basic knowledge and information about the various types of benefits that are typically offered by employers for their employees.

Prerequisite: None

Corequisite: None

HRES 1134 Training and Development 3 3/0/0

This course covers basic information about the characteristics of effective orientation programs and the scope of organizations, training and continuing development programs in building an effective work force.

Prerequisite: None

Corequisite: None

HRES 2204 Policy Administration 3 3/0/0

This course covers basic information and understanding of the need for human resources policies in an organization, types of policies, the process of policy formulation and how policies are used.

Prerequisite: None

Corequisite: None

HRES 2212 Wage/Salary Administration 3 3/0/0

This course covers basic knowledge and understanding of employee compensation and related federal laws.

Prerequisite: None

Corequisite: None

HRES 2224 Employee/Labor Relations 3 3/0/0

This course covers basic information about the history of labor unions, current labor laws, the current role of labor unions, workers compensation laws and the rights of employees.

Prerequisite: None

Corequisite: None

HRES 2245 Human Resources Internship 1–4 None

This course is designed to provide the student with a purposeful occupational experience in the human resources field. Each internship is an individualized experience. A training plan is created for each student in conjunction with the training site to provide experience related to the skills and knowledge acquired in the program. One credit of internship is equal to 45 hours of internship.

Prerequisite: None

Corequisite: None

HRES 2252 Human Resources Competency and Portfolio Evaluation 2 1/1/0

This course reviews and reinforces the principles covered in the Human Resource program through the development of a comprehensive student portfolio and simulated activities related to program outcomes. The course also develops knowledge of career processes and the skills needed in conducting an effective job search.

Prerequisite: None

Corequisite: None

HRES 2254 Human Resource Systems and Portfolio Evaluation 3 2/1/0

This course reviews and reinforces the principles covered in the Human Resource program through the development of a comprehensive student portfolio and simulated activities related to program outcomes and systems found in Human Resources. Students will apply basic concepts, terminology, functions and outputs needed to maintain and utilize human resource information systems in operations and strategic planning. The course also develops knowledge of career processes and the skills needed in conducting an effective job search.

Prerequisite: None

Corequisite: None

HUM 1101 Introduction to the Humanities 3 3/0/0

Meets MnTC Goal Areas 2 and 6. This course serves as a general introduction to the role that humanities such as the arts, literature and philosophy play in shaping humanity’s conception of itself and society. This course serves to expand the student’s knowledge of the human condition and human cultures, especially the values expressed in works of human imagination and thought.

Prerequisite: None

Corequisite: None

HUM 1105 Religion in the Humanities 3 3/0/0

Meets MnTC Goal Areas 6 and 8. This course is an exploration and study of religious expression and experience as well as an introduction to the world’s major religions. The focus of the course will be on human expression of religious belief and philosophy in literature, film, music and art, and it will cover a variety of world religions including Buddhism, Hinduism, Islam, Judaism and Christianity. Throughout the course, students will explore diversity and human religious expression as a way of enhancing their global perspective.

Prerequisite: None

Corequisite: None

HUM 1110 Native American Culture 3 3/0/0

Meets MnTC Goal Areas 2, 6 and 7. This course is an interdisciplinary study of the social and cultural life of Native Americans, primarily the Plains Indians. Students consider traditional and contemporary expressions of Native peoples as well as the history from which these expressions spring, especially the impact that contact with European peoples had and continues to have on Native American ways of life.

Prerequisite: None

Corequisite: None

HUM 1120 Culture of Italy 3 3/0/0

Meets MnTC Goal Areas 6 and 8. This multidisciplinary course will introduce students to a close study of the art, drama and music of Italy. Students will develop an appreciation of the Italian culture and an understanding of the integration of the arts within the culture. Upon completion of HUM 1120, students will be eligible for GLST 1121 Humanities Italy.

Prerequisite: None

Corequisite: None

HUM 1132 Women in the Humanities 3 3/0/0

Meets MnTC Goal Areas 6 and 7. This course is a study of the contributions of women in the humanities as writers, artists and social reformers with emphasis on 20th century women. The course will incorporate individual studies of Quaker women, frontier women, African American women and Native American women.

Prerequisite: None

Corequisite: None

HUM 1134 Global Perspectives for Women 3 3/0/0

Meets MnTC Goal Areas 6 and 8. This course is a multi-disciplinary study designed to enhance international perspective on women in the humanities with emphasis on 21st-century women’s cultural contributions as composers, artists and social reformers. The course will incorporate studies on women of China, Latin America and Europe.

Prerequisite: None

Corequisite: None

HUM 1201 Religion and the American Experience 3 3/0/0

Meets MnTC Goal Areas 6 and 7. This course will explore the relationship between religion and the ongoing development of American culture, especially as it relates to the role diversity plays in American history, arts, entertainment and institutions. Students will explore the variety of religious traditions that have been a part of the American experience and how they impacted and adapted to a changing national identity. Topics may include Native American thought and colonialism, the part played by Protestantism in the development of American ideals, the role of race and immigration in American religious identity, and the contemporary struggle among traditional Christian thought, secularism, reclaimed primal religions and modern world religions.

Prerequisite: None

Corequisite: None

HUM 2210 Introduction to Film 3 3/0/0

Meets MnTC Goal Areas 2 and 6. This course offers students an overview of the elements that comprise telling stories on film. Students will study shot, angle, lighting, close-up, in- scene, movement, editing, sound, etc. The course will also consider how film elements work to present various ideologies. Students will become familiar with open and closed forms and the distinctions between realism, classicism and formalism. Students will participate in film analysis using the concepts above.

Prerequisite: None

Corequisite: None

HUM 2230 World Cinema 3 3/0/0

Meets MnTC Goal Areas 6 and 8. This course will introduce students to films from non-English speaking countries around the globe. The course will study stories and societies through cinema, readings and lecture. Students will consider their own worldview while they screen films and analyze multiple themes and ideas as a means of enriching their global perspective.

Prerequisite: None

Corequisite: None

HUM 2236 Technology in the Humanities 3 3/0/0

Meets MnTC Goal Areas 2, 6 and 8. Developments in the arts, architecture, science, philosophy and education and studies in human interaction are often provoked by changes in technology. Early changes in military technology made it possible for civilizations to take charge of various places on the world’s stage. However, over
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This course covers residential gas and oil heating units, primarily forced air furnaces. Emphasis is on understanding the sequence of operation, proper adjustment, efficiency measurement and safety. Diagnosis and repair of malfunctioning furnaces is part of this course.

Course Descriptions

Time, changes in how the world was understood, motivated by general advances in global exploration, astronomy, and other sciences as well as specific inventions such as movable type, proved even more instrumental in driving people to new and different understandings of what it means to be human. This course explores how technology impacts developments in a culture's world view and tries to anticipate how future changes in technology might alter the course of otherwise established ways of life.

HUM 2281 Culture of the British Isles | 3 | 3/0/0 |

Meets MnTC Goal Areas 6 and 8. This multidisciplinary course will introduce students to a close study of the art, literature and music of the British Isles with an emphasis on England, Ireland and Wales. Students will develop an appreciation of the Irish, English and Welsh cultures and an understanding of the integration of the arts within each culture. Registering for Humanities 2281 will make each student eligible for GLST 2291: Humanities, British Isles.

Prerequisite: None
Corequisite: None

HUM 2293 Field Experience: Europe | 3 | 3/0/0 |

Meets MnTC Goal Areas 6 and 8. This course provides a travel-abroad experience taken to encourage studies in the humanities involving visits to sites that are often discussed in the traditional classroom. The course includes scheduled academic activities in preparation for the trip. The students continue their studies in cities such as London, Paris, Rome, Munich or other locations as determined by the instructor.

Prerequisite: None
Corequisite: None

HUM 2295 Field Experience: The East | 3 | 3/0/0 |

Meets MnTC Goal Areas 6 and 8. A travel abroad experience taken to encourage studies in the humanities involving visits to sites that are often discussed in the traditional classroom. The course includes scheduled academic activities in preparation for the trip. The students continue their studies in countries in the East, Middle East and Eastern Europe as determined by the instructor.

Prerequisite: None
Corequisite: None

HUM 2299 Field Experience: Travel | 1 | 0/0/0 |

This course will add to the student’s electrical knowledge regarding circuits and schematics.

Prerequisite: None
Corequisite: None

HUM 2301 Heroes, Moral and Cultural | 3 | 3/0/0 |

Meets MnTC Goal Areas 6 and 6. The term hero is sometimes used synonymously with the term role model, and in this class we will identify what characteristics are present in the heroic figure as well as explore the motives of the hero. Why do we expect our heroes to suffer? The vast majority of heroes are single; Why is it related to the notion of incorruptibility, or is it to spare them the hard decisions (to save a spouse or three other strangers? Are there links or analogies to the story of Jesus? What do we admire about heroes? Is it the chameleon property? What kinds of things can be considered superpowers and what do they represent figuratively, metaphorically, mythically, symbolically, morally and culturally? Are heroes archetypically different according to gender, or are heroes gender-neutral? Are heroes representatives of the culture they originate in, or are they products of that culture, or both? Are heroes representatives of a particular moral position, or are they a generic good? These are the types of questions we will explore in this class.

Prerequisite: None
Corequisite: None

HVAC 1102 Duct Fitting Construction | 3 | 1/2/0 |

Standard metal fittings will be constructed in this class. Familiarity with sheet metal shop equipment and various tools will be gained through the layout and construction of sheet metal projects. All fittings in this class will be found in standard duct applications.

Prerequisite: None
Corequisite: None

HVAC 1103 Electricity for Heating, Ventilating and Air Conditioning | 4 | 2/2/0 |

This course explains DC and AC theory, beginning with mathematically solving and hooking up series DC circuits and advancing into solving and hooking up AC resistance in series, parallel and combination circuits. HVAC relays and contactors and furnace safety devices are studied and wired in the lab. There is a dual emphasis on reading and then translating schematic drawings. Magnetism and the generation of AC transformers as applied to HVAC, inductors and inductance-resistance parallel and series combination circuits are solved using trigonometry. Capacitance is introduced and applied as a function in understanding AC motors.

Prerequisite: None
Corequisite: None

HVAC 1104 Heating, Ventilating, and Air Conditioning Electrical Controls | 3 | 1/2/0 |

This course covers the wiring of typical heating and cooling circuits, along with the hook-up and installation of air conditioning.

Prerequisite: None
Corequisite: None

HVAC 1128 Heating, Ventilating, and Air Conditioning Design and Installation | 5 | 2/3/0 |

This course includes an overview of various heating controls and appliances. Topics will include blueprints as applied to estimating heating and cooling loads; gas piping as installed in residential and light commercial jobs; safe heating, ventilating and air conditioning practices; various venting codes and requirements; and the sizing of furnaces, duct work and piping.

Prerequisite: None
Corequisite: None

HVAC 1224 Gas and Oil Heating | 3 | 1/2/0 |

This course covers residential gas and oil heating units, primarily forced air furnaces. Emphasis is on understanding the sequence of operation, proper adjustment, efficiency measurement and safety. Diagnosis and repair of malfunctioning furnaces is part of this course.

Prerequisite: None
Corequisite: None

HVAC 2201 Air Handling | 2 | 1/0/0 |

The dynamics of handling fluid masses of air will be studied. The focus will be on moving and replacing air at given velocities, quantities and temperatures.

Prerequisite: None
Corequisite: None

HVAC 2221 Hot Water Heating | 3 | 2/1/0 |

This course covers both hot water baseboard and in-floor heating, with emphasis on calculations involved in hydronic heating.

Prerequisite: None
Corequisite: None

HVAC 2221 Heat Pump Theory and Operation | 3 | 2/1/0 |

This course will cover the various methods by which mechanical processes are used to extract heat from different sources into residential housing. Some attention to commercial methods will be offered. An example of this would be use of the compression cycle of refrigeration to extract heat from the outside air.

Prerequisite: None
Corequisite: None

HVAC 2290 Heating, Ventilating, and Air Conditioning Internship | 1 | 0/0/1 |

This course will cover the various methods by which mechanical processes are used to extract heat from different sources into residential housing. Some attention to commercial methods will be offered. An example of this would be use of the compression cycle of refrigeration to extract heat from the outside air.

Prerequisite: None
Corequisite: None

IHS 1293 OSHA 10-Hour General Industry Safety | 1 | 1/0/0 |

This course is designed for general industry workers under the Occupational Safety and Health Administration (OSHA) 29 CFR 1910 who need to receive additional training on job-site-specific hazards. Students will learn the entry-level safety training required for OSHA 10-Hour General Industry course authorization. In addition to the 10-hour mandatory requirements, students will also be trained in five hours of additional OSHA elective material served by this course include but are not limited to health care, manufacturing, warehousing, distribution, retail and education.

Prerequisite: None
Corequisite: None

IHS 1296 OSHA 10-Hour Construction Safety | 1 | 1/0/0 |

This course is designed for construction workers under Occupational Safety and Health Administration (OSHA) 29 CFR 1926 who need to receive additional training on job-site-specific hazards. Students will learn the entry-level safety training required for OSHA 10-Hour Construction course authorization. In addition to the 10-hour mandatory requirements, students will also be trained in five hours of additional OSHA elective material.

Prerequisite: None
Corequisite: None

IHS 2297 OSHA 30-Hour Construction Safety | 2 | 2/0/0 |

This course is designed for workers under Occupational Safety and Health Administration (OSHA) 29 CFR 1910 who need to receive additional training on job-site-specific hazards related to their place of employment. Students will learn the skills necessary for OSHA 30-Hour General Industry course authorization.

Prerequisite: None
Corequisite: None

IHS 1299 OSHA 30-Hour Construction Safety | 2 | 2/0/0 |

This course is designed for construction workers under Occupational Safety and Health Administration (OSHA) 29 CFR 1926 who need to receive additional training on job-site-specific hazards. Students will learn the skills necessary for OSHA 30-Hour Construction course authorization.

Prerequisite: None
Corequisite: None

ILS 1100 Integrative Learning Seminar I | 1 | 1/0/0 |

This course meets MnTC Goal Area 2. Students will begin to develop collegiate-level, transferable skills as they are introduced to the M State core abilities and liberal arts and sciences shared values. Students will begin to learn how to critically evaluate assumptions and ideas, how to determine the ethical implications that come with decision making, and how to communicate effectively as they develop an understanding of course materials through written and oral exercises. Students will establish a digital folio, which will allow them to demonstrate their growing understanding and mastery of the shared values and core abilities.

Prerequisite: Assessment into ENGL1101
Corequisite: None

ILS 2100 Integrative Learning Seminar II | 2 | 2/0/0 |

Meets MnTC Goal Area 2. This course provides a cohesive, integrative learning experience for liberal arts and sciences student. The student will integrate skills and knowledge developed and acquired throughout his or her course of study in the disciplines. The course requires the student to embark on a comprehensive inter-disciplinary academic quest designed to demonstrate research, oral and written communication, and critical thinking skills.

Prerequisite: Completion of 40 credits AND ILS1100
Corequisite: None

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IMMA 1110 Introduction to Power and Mechanical Systems 3 1/2/0
This course will provide an overview of the design, operation and maintenance principles of basic mechanical system components. The terminology, theory, application and construction of mechanical components dealing with power transfer found within the typical factory will be discussed. The course is designed to provide an understanding of the basic physics principles that govern mechanical power transmission through the use of belt, chain and gear drives, clutch and braking mechanisms, coupling devices, linear actuators and bearings. 
Prerequisite: None
Corequisite: None

IMMA 1112 Mechanical Blueprint Reading 2 2/0/0
This course will teach the fundamentals of blueprint reading and will include the interpretation of geometric construction, multi-view projection, dimensioning, auxiliary and sectional views. The course will also include the identification of drafting symbols and conventional methods of presentation. 
Prerequisite: None
Corequisite: None

IMMA 2223 Fluid Power Lab 2 1/1/0
This class teaches the skills of construction, control and operation of hydraulic and pneumatic systems coupled with electrical/electronic controls. Participants will perform hands-on experiments to construct circuits that teach the operation of individual components as well as complete systems used in real-world applications. Assemblies involving fluid power and the modern control components used to regulate it will be emphasized. 
Prerequisite: MATH0052 AND An accuplacer arithmetic score of 57 or completion of Math 0052
Corequisite: None

IND 1110 Introduction to the Industrial Workplace 3 3/0/0
This course provides an introduction to the industrial workplace focusing on the work ethic, workplace costs, project management, workplace training and problem solving. 
Prerequisite: None
Corequisite: None

IND 1160 Food Manufacturing Science 3 3/0/0
This course provides students with an introduction to the science of food manufacturing. The course will cover the cleaning and sanitizing processes involved in safe food handling. Students will learn how to identify food safety hazards and will gain an understanding of the chemical, regulatory agencies and sampling processes involved in food manufacturing. 
Prerequisite: None
Corequisite: None

IND 1500 Introduction to Steel Welding 2 1/1/0
This course will educate the student in the basic welding and cutting processes used in the welding industry. The skills developed in the lab include gas metal, gas tungsten and shielded metal arc welding processes and the oxy/fuel and plasma arc cutting processes on mild steel in the flat position. Safety in welding and cutting will be covered relating to the welding and cutting processes being used in class. 
Prerequisite: None
Corequisite: None

IND 1501 Basic Steel Welding 4 1/3/0
This course will educate the student in basic welding and cutting processes used in the welding industry. The skills developed in the lab include gas metal, gas tungsten and shielded metal arc welding processes and the oxy/fuel and plasma arc cutting processes on mild steel in the flat and horizontal positions. Safety in welding and cutting will be covered relating to the welding and cutting processes being used in class. 
Prerequisite: None
Corequisite: None

IND 1502 Basic Print Reading for Welders 3 3/0/0
This course is designed to help read basic engineering drawings for welders and interpret the welding symbols system. The students' knowledge can then be applied to manufacturing, construction and repair industries. 
Prerequisite: None
Corequisite: None

INTE 1100 Industry Internship Experience 3 0/0/3
This is a three-credit internship experience designed to acquaint students with an industrial environment. This experience is designed to integrate the coursework taken and contribute to the student's personal and/or professional career goals. The internship is a training and mentoring period in actual service or employment. 
Prerequisite: None
Corequisite: None

IPP 1111 Introduction to Interpreting 3 3/0/0
This course introduces the field of interpreting and the role of a sign language interpreter. It covers interpreting as a field of professional practice, the current nature of the field, the variety of employment opportunities, interpreter training, interpreter certification and professional ethical standards. 
Prerequisite: ASL1114 AND Grade of B or better in ASL1114
Corequisite: None

IPP 1112 Beginning American Sign Language to English 3 3/0/0
This course focuses on the process of interpreting, provides practice of necessary skills and procedures and applies aptitude and theory to the translation process. This course focuses on lexical development, syntactical language comparisons, voice production techniques, interpreting process analysis and diagnostic assessment. The course content centers on techniques for sign-to-voice interpreting.
Prerequisite: ASL1114 AND Grade of B or better in ASL1114
Corequisite: None

IPP 1113 Beginning English to American Sign Language 3 3/0/0
This course focuses on the development of consecutive and simultaneous interpreting skills from English to American Sign Language. This course will initiate language analysis along with theoretical and practical skills related to the interpreting process. The course content centers on techniques for voice-to-sign interpreting. 
Prerequisite: ASL1114 AND Grade of B or better in ASL1114
Corequisite: None

IPP 2112 Advanced American Sign Language to English 3 3/0/0
This course provides additional practice in specific skill areas related to sign-to-sign interpreting. This course focuses on advanced lexical development, syntactical language comparisons, voice production techniques, interpreting process analysis and diagnostic assessment. The course content is at an intermediate to advanced level of speed and complexity along with voice production techniques for simultaneous sign-to-voice interpreting for increasingly complex language exchanges. 
Prerequisite: IPP1112 AND Grade of B or better in IPP1112
Corequisite: None

IPP 2113 Advanced English to American Sign Language 3 3/0/0
This course provides additional practice in specific skills related to voice-to-sign interpreting. This course focuses on advanced development of simultaneous interpreting skills. This course centers on critical thinking and processing skills at an intermediate level with determining language needs within a variety of interpreting settings. The course content is at an intermediate to advanced level of speed and accuracy along with translation techniques for simultaneous English-to-American Sign Language interpreting. 
Prerequisite: IPP1113 AND Grade of B or better in IPP1113
Corequisite: None

IPP 2114 Educational Interpreting 2 2/0/0
This course introduces the role and responsibilities of an interpreter in a mainstream educational environment. This course focuses on increasing the awareness of current techniques, issues and ethics in mainstreaming education practices. 
Prerequisite: IPP1111 AND Grade of B or better in IPP1111
Corequisite: None

IPP 2215 Topics in Interpreting 2 2/0/0
This course focuses on continued development of interpreting skills. The course content consists of special topics in the area of interpreting including team interpreting, athletics, religion, medical, legal, deaf/blind and video interpreting. This course also focuses on preparation for certification exams. 
Prerequisite: IPP1111 AND Grade of B or better in IPP1111
Corequisite: None

IPP 2216 Practicum 1 0/0/1
This course is designed to introduce various models and experiences of interpreting and to prepare for the tasks required for functioning as a professional interpreter. This course includes practical work experience observation and analysis of an interpreter's work. Students are expected to observe working interpreters in a variety of field settings. 
Prerequisite: IPP1111 AND Grade of B or better in IPP1111
Corequisite: None

IPP 2217 Interpreting Internship 6 0/0/6
This course is a supervised interpreting opportunity in an educational, community, service agency or other setting. This course includes completion of documentation, assignments for portfolio, problem solving, site orientation, student performance evaluations, observation of certified interpreters, collaboration with certified interpreters, professional job expectations and actual interpreting experience. This internship abides by the National Association of the Deaf (NAD)-Registry of Interpreter for the Deaf (RID) Code of Professional Conduct. 
Prerequisite: IPP2216 AND Instructor approval
Corequisite: ASL2100 AND Grade of B or better in ASL2100

IPP 2218 Internship Seminar 1 1/0/0
This course provides an open forum to discuss situations arising from interpreter assignments during the internship. This course focuses on final preparations for entering the interpreting field. 
Prerequisite: IPP2216
Corequisite: None

ITSS 1100 Information Technology Help Desk 3 2/1/0
This course is an introduction to information technology user support. Important skill sets involving customer service, troubleshooting, user support management, product evaluation, user support management and user training are introduced. This course also emphasizes teamwork and technical writing. 
Prerequisite: None
Corequisite: None

ITSS 1120 Information Technology Research and Documentation 3 1/2/0
Using the Worldwide Web, students will research current trends and technical issues in information technology. Research topics will include software applications, hardware products, security issues, and technical problems and solutions. Students will develop technical documentation and training materials for the purpose of supporting end users. Emphasis will also be placed on refining Web searching skills to locate vendor
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This course is an introduction to systems of linear equations and inequalities, matrices, linear programming, mathematics of finance and elementary probability and statistics. This course is intended for all liberal arts and science students, but is highly recommended for students in areas of management, health sciences and other applied technologies.

Prerequisite: MATH1020
Corequisite: None

MATH 1114 College Algebra
Meets MnTC Goal Areas 2 and 4. This course includes rational, polynomial, exponential, logarithmic, inverse and quadratic functions. The course also includes equations, inequalities, complex numbers and systems of linear equations. Additional topics may include matrices and determinants.

Prerequisite: MATH1020 AND or by placement exam
Corequisite: None

MATH 1115 Functions/Trigonometry
Meets MnTC Goal Areas 2 and 4. This course includes trigonometric functions, right triangle trigonometry, radian measure and circular functions, identities, equations, inverse functions, oblique triangles, complex numbers, vectors, polar coordinates and conic sections.

Prerequisite: MATH1114
Corequisite: None

MATH 1116 College Trigonometry
Meets MnTC Goal Areas 2 and 4. Topics include trigonometric functions, right triangle trigonometry, radian measure and circular functions, identities, equations, inverse functions, laws of cosines and sines. Optional topics may include complex numbers, vectors and polar coordinates.

Prerequisite: MATH1114
Corequisite: None

MATH 1118 Precalculus
Meets MnTC goal areas 2 and 4. This course includes trigonometric identities and polynomial, exponential, logarithmic, rational and trigonometric functions, their inverses and their graphs. Optional topics may include matrices and determinants, conic sections, vector concepts and polar coordinates.

Prerequisite: MATH1020 AND Math 1020 with a C or better by placement score
Corequisite: None

MATH 1122 Applied Calculus and Linear Algebra
Meets MnTC Goal Areas 2 and 4. This course is an introduction to optimization, the simplex method, differential and integral calculus with an emphasis on applications in the areas of business and the life and social sciences. This course is intended for all liberal arts and science students but is highly recommended for students pursuing business careers.

Prerequisite: MATH1114
Corequisite: None

MATH 1134 Calculus I
Meets MnTC Goal Areas 2 and 4. This course includes limits and continuity, derivatives, definite and indefinite integrals of algebraic, trigonometric, exponential and logarithmic functions, and applications of the derivative and definite integral.

Prerequisite: MATH1115 AND or by placement exam OR MATH1116 OR MATH1118
Corequisite: None

MATH 1135 Calculus II
Meets MnTC Goal Areas 2 and 4. This course includes integration of logarithmic, exponential, trigonometric and hyperbolic functions and their inverses. Students will apply techniques of integration. Polar coordinates, conic sections, indeterminate forms, improper integrals and infinite series are also included.

Prerequisite: MATH1134
Corequisite: None

MATH 1207 Elementary Statistics
Meets MnTC Goal Areas 2 and 4. This course will investigate descriptive and inferential statistical concepts including measures of central tendency, measures of variation, measures of position, frequency tables, statistical graphs, probability distributions, hypothesis tests, confidence intervals, regression and correlation. TI calculators, MINITAB or EXCEL may be used for data analysis.

Prerequisite: MATH1114 OR MATH1118 OR by placement
Corequisite: None

MATH 1213 Introduction to Statistics
Meets MnTC Goal Areas 2 and 4. Topics include data summary, frequency distributions, plots, graphs, measures of central tendency, variation, probabilities, probability distributions, confidence intervals. Hypothesis testing of means, proportions and variances will be conducted using the t-test, F-test, chi-square test, t-test and ANOVA. Optional topics may include nonparametric statistics, sampling and simulation.

Prerequisite: MATH1134 AND or by placement exam OR MATH1118
Corequisite: None

MATH 2200 Principles of Arithmetic
Meets MnTC Goal Areas 2 and 4. This is primarily a mathematics rather than a methods course. Concepts covered include arithmetic as a system of thought, number and sets, basic number operations and their underlying formal logic, number structure and basic geometry concepts.

Prerequisite: MATH1114 OR MATH1100
Corequisite: None
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<td>Calculus III</td>
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<td>4/0/0</td>
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<tr>
<td>ADD1114 AND MCDD1106</td>
<td></td>
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<tr>
<td>MATH 2257</td>
<td>Linear Algebra</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td>MATH1231</td>
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<tr>
<td>MATH 2259</td>
<td>Differential Equations</td>
<td>4</td>
<td>4/0/0</td>
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<tr>
<td>MATH2231</td>
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<tr>
<td>MCDD 1104</td>
<td>Mechanical Engineering Drawing I</td>
<td>6</td>
<td>1/3/0</td>
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<tr>
<td>MCDD 1106</td>
<td>Mechanical Engineering Drawing II</td>
<td>4</td>
<td>0/4/0</td>
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<tr>
<td>MATH 1135</td>
<td>Calculus III</td>
<td>4</td>
<td>4/0/0</td>
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<tr>
<td>ADD1100 AND MCDD1106</td>
<td></td>
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<tr>
<td>MATH 2200</td>
<td>Advanced Modeling with Solidworks</td>
<td>3</td>
<td>2/1/0</td>
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<tr>
<td>ADD1114 AND MCDD1106</td>
<td></td>
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<tr>
<td>MATH 2204</td>
<td>Mechanical Engineering Drawing III</td>
<td>4</td>
<td>1/3/0</td>
</tr>
<tr>
<td>MCDD 2210</td>
<td>Advanced Modeling with Inventor</td>
<td>3</td>
<td>2/1/0</td>
</tr>
<tr>
<td>CAD1114 AND CAD1000</td>
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<tr>
<td>MATH 2210</td>
<td>Mechanical Engineering Drawing IV</td>
<td>2</td>
<td>1/1/0</td>
</tr>
<tr>
<td>MCDD 2220</td>
<td>Mechanical Engineering Drawing IV</td>
<td>2</td>
<td>1/1/0</td>
</tr>
<tr>
<td>CAD1114</td>
<td></td>
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</tr>
</tbody>
</table>

McD 2246 | Tool Design | 1 | 2/0/0 |
<p>| MCDD 2252 | Mechanical Drafting Applications II | 4 | 1/3/0 |
| MCDD 2254 | Computer Numerical Control | 2 | 1/1/0 |
| MCDD 2260 | Mechanical Drafting Internship | 3 | 0/0/3 |
| MCOM 1122 | Introduction to Mass Communication | 3 | 3/0/0 |
| MCOM 1142 | Popular Culture and Social Media | 3 | 3/0/0 |
| MCS 2231 | Multicultural America | 1 | 1/0/0 |</p>
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
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</thead>
<tbody>
<tr>
<td>MEDA 1150</td>
<td>Pathophysiology, Pharmacology and Nutrition</td>
<td>4</td>
<td>4/0/0</td>
</tr>
<tr>
<td></td>
<td>This course covers pathophysiology, pharmacology and nutrition as related to body systems. This will include signs, symptoms and etiology of pathology as well as appropriate drug uses, effects, dangers and precautions as well as routes of administration, dilutions and calculations, management and control. Students will review common prescription abbreviations, forms of medications and basic drug categories.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
<td></td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
<td></td>
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<tr>
<td>MEDA 1240</td>
<td>Clinical Procedures I</td>
<td>4</td>
<td>2/2/0</td>
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<tr>
<td></td>
<td>This course develops basic clinical and laboratory skills. Emphasis will be placed on lab safety and proper usage of personal protective equipment. Course topics include patient preparation and care, managing diagnostic testing, electrocardiography and pulmonary function testing.</td>
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<tr>
<td>Prerequisite:</td>
<td>American Heart Association Health Care Provider CPR</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDA 1260</td>
<td>Clinical Procedures II</td>
<td>4</td>
<td>2/2/0</td>
</tr>
<tr>
<td></td>
<td>This course further develops clinical skills for the medical assistant. Students will perform venipunctures and capillary punctures and perform medication administration techniques. Additionally, students will collect and test specimens using proper specimen-handling procedures as dictated by the Clinical and Laboratory Standards Institute (CLSI).</td>
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<tr>
<td>Prerequisite:</td>
<td>MEDA1150</td>
<td></td>
<td></td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDA 1600</td>
<td>Medical Assisting Externship</td>
<td>5</td>
<td>1/0/4</td>
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<tr>
<td></td>
<td>Students will complete a practicum in a health care facility. Students will function as a member of a health care team, applying skills learned throughout the program.</td>
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<tr>
<td>Prerequisite:</td>
<td>MEDA1260</td>
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<td></td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
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<tr>
<td>METC 1112</td>
<td>Manufacturing Processes</td>
<td>4</td>
<td>2/2/0</td>
</tr>
<tr>
<td></td>
<td>This course teaches the fundamentals of traditional and non-traditional manufacturing processes including mass reducing, mass conserving, joining, material treatment and surface treatment processes. Hands-on experiences in laboratories provides class participants with basic skills in machining, welding and wood processing technologies.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>METC 1152</td>
<td>Safety and Accident Prevent</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td></td>
<td>This course is designed to explore the principles and practices of health and safety in the industrial environment. Topics covered include regulations of the Environmental Protection Agency (EPA), Occupational Safety and Health Act (OSHA and MNOSHA), legal considerations, current legislation, product safety, hazard materials, infection control and employee protection.</td>
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<tr>
<td>Prerequisite:</td>
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<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>METC 2208</td>
<td>Basic Electricity and Electronics</td>
<td>3</td>
<td>2/1/0</td>
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<tr>
<td></td>
<td>This course surveys the fundamentals of electricity and electronics including electrical/electronic components, AC/DC circuits, electronic devices and applications, basic electronic circuits, and electronic communication and data systems.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
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<tr>
<td>MIS 1100</td>
<td>Business Computers</td>
<td>3</td>
<td>2/1/0</td>
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<td></td>
<td>Students will utilize business computer software applications including word processing, spreadsheets, databases and presentation software to solve business problems emphasizing professional design and organization. Additional topics include basic computer hardware, computer security and ethics, privacy concerns and professional communication standards.</td>
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<tr>
<td>Prerequisite:</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
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<tr>
<td>MKTG 1050</td>
<td>Direct Selling</td>
<td>3</td>
<td>3/0/0</td>
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<td></td>
<td>The success of an entrepreneurial venture is directly related to entrepreneur's ability to constantly and consistently sell. The student will learn the three vital aspects of small-business selling, including one-on-one selling, presentation selling and creating win/win negotiations. Even if the student has never sold before, he or she will become proficient at all aspects of the sales, presentation and negotiation process. Students will have the opportunity to practice multiple aspects of direct selling in a safe classroom environment. In addition, the student will develop specific sales strategies with other members of the class.</td>
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<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 1106</td>
<td>Professional Selling</td>
<td>3</td>
<td>3/0/0</td>
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<td></td>
<td>This course covers a fundamental sales approach that can be used as a foundation for future sales courses. The content covers steps used to plan a sales presentation and methods of determining and filling prospect needs or wants.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
<td></td>
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<tr>
<td>MKTG 1110</td>
<td>Customer Service</td>
<td>3</td>
<td>3/0/0</td>
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<td></td>
<td>Customer service can determine both a company's and an employee's success or failure. This course covers the skills necessary for an individual to build and maintain customer loyalty. Strategies needed to sustain a positive work environment will be identified. Evaluating and improving customer service systems, from traditional customer satisfaction measurement tools to technology-based customer relationship management systems (CRM), will be explored.</td>
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<td>Prerequisite:</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 1116</td>
<td>Advertising and Promotion</td>
<td>3</td>
<td>3/0/0</td>
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<td></td>
<td>This course focuses on the role of promotion within the marketing plan of an organization. Students will study advertising trends that influence an organization's promotional strategy. Emphasis will be placed on current advertising media, costs, budgeting, ad development and evaluation. This course will have an active learning environment. Students will create and present a promotional campaign.</td>
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<td>Prerequisite:</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 1120</td>
<td>Supervisory Leadership</td>
<td>3</td>
<td>3/0/0</td>
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<td></td>
<td>The methods and techniques of leadership and supervision and their applications are emphasized in this course. The content covers such topics as delegation, motivation, training, orienting, evaluating and effectively increasing productivity.</td>
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<td>Prerequisite:</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 1128</td>
<td>Business Insights</td>
<td>1</td>
<td>0/1/0</td>
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<td>Examination of the marketing industry from manufacturing to the final product is covered in this course. Students analyze the impact of current trends, the economy and technology in the marketplace.</td>
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<td>Prerequisite:</td>
<td>None</td>
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<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 1130</td>
<td>Leadership Ethics</td>
<td>3</td>
<td>3/0/0</td>
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<td>This course is designed to help the individual determine what constitutes ethical issues and gain insight into how an individual can cope with conflicts between personal values and those of the organization where he or she works.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
<td></td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 1200</td>
<td>Introduction to Social Media</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td></td>
<td>This course provides students with an introduction to several popular social media sites. Emphasis is on how to use social media platforms to successfully market your business and/or products. Special attention will be paid to when this type of marketing is most effective, how to select the most effective social media outlet for your particular target demographic and tracking results.</td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 1210</td>
<td>InDesign</td>
<td>3</td>
<td>3/0/0</td>
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<tr>
<td></td>
<td>This course introduces students to digital page layout using Adobe InDesign. This course is for anyone who has to prepare professional business publications. Students will learn how to set type and use digital images to produce effective printed business publications including newsletters, advertising flyers, business forms, brochures, manuals and catalogs. Students will learn how to create and modify pdf files for electronic distribution of publications.</td>
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<tr>
<td>Prerequisite:</td>
<td>CPR1104</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 1280</td>
<td>Search Engine Optimization</td>
<td>3</td>
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<td>This introductory class will focus on the Internet marketing strategy of Search Engine Optimization (SEO). It will cover how search engines work, what people search for, the actual search terms or keywords typed into search engines and which search engines are preferred by their targeted audience. Optimizing a website may involve editing its content and HTML and associated coding to both increase its relevance to specific keywords and to remove barriers to the indexing activities of search engines.</td>
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<tr>
<td>Prerequisite:</td>
<td>INTD1108 AND CPR1104</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 2204</td>
<td>Advanced Professional Selling</td>
<td>3</td>
<td>2/1/0</td>
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<td>This course provides opportunity for the student to apply the steps of a sales presentation by planning and performing sales presentations in role-playing situations. The student applies strategies in sales communications, customer-oriented selling and sales management.</td>
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<tr>
<td>Prerequisite:</td>
<td>MKTG1106</td>
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<tr>
<td>Corequisite:</td>
<td>None</td>
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<tr>
<td>MKTG 2206</td>
<td>Sales Management</td>
<td>3</td>
<td>2/1/0</td>
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<td>This is an advanced management course that focuses on sales force planning, implementation and control. This course covers the managerial topics of sales planning, staffing, training and directing, as well as analyzing and evaluating the sales force.</td>
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<tr>
<td>Prerequisite:</td>
<td>MKTG1106</td>
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<td>Corequisite:</td>
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<tr>
<td>MKTG 2214</td>
<td>E-Marketing</td>
<td>3</td>
<td>3/0/0</td>
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</tbody>
</table>
|         | This course examines emerging electronic technologies and their impact on a firm's marketing strategy. Emphasis is placed on trends in e-marketing as well as the unique

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COURSE DESCRIPTIONS
opportunities and challenges faced in the electronic environment. Students will apply the principles of the electronic marketing mix to an electronic marketing strategy. 

Prerequisite: MKTG1100 OR MKTG2206
Corequisite: None

MKTG 2218 Retail Management
3 3/0/0

Class emphasis is on the strategic decisions made by retailers and how those decisions impact how, when, where and in what quantities customers will buy. Emphasis is also on hands-on application of the theories and principles introduced in class. Topics include using professional retailing terminology, analyzing environmental influences and identifying how retailers can appropriately respond to these influences as they make operational decisions such as site selection, determining merchandising practices, managing inventory, and determining pricing strategies. 

Prerequisite: None
Corequisite: None

MKTG 2222 Human Resource Management
3 3/0/0

The purpose of this course is to acquaint the student with the importance of human resource management in contributing to the achievement of an organization’s objectives. The content addresses techniques and legal aspects of recruiting, hiring, firing, promotion, documentation, evaluation and other areas essential to the personnel function. 

Prerequisite: None
Corequisite: None

MKTG 2230 Marketing Research
2 2/1/0

This course covers market research principles and procedures that are necessary for marketing professionals to be successful. Topics covered include survey methods and techniques, problem identification, data collection techniques, sample type and size, presentation of findings and using the Internet as a source. 

Prerequisite: None
Corequisite: None

MKTG 2232 Marketing Management
2 2/1/0

This is a capstone course designed to be taken near the completion of the required marketing courses. The course is designed to integrate learning acquired in prior marketing courses with an emphasis on strategic marketing planning. This class will involve all aspects of developing a comprehensive marketing plan for a product or service. 

Prerequisite: BUS2206
Corequisite: None

MKTG 2234 Computer Marketing Applications
2 2/1/0

This course challenges students to produce computer projects using spreadsheets, databases, graphics, and word processing. The emphasis is on documents produced by marketing departments and marketing firms. The student plan, creates, prints and evaluates projects individually and as a team. 

Prerequisite: None
Corequisite: None

MKTG 2236 Small Business Management
3 3/0/0

This course provides a summary of many of the major issues faced by anyone starting a small business. The course teaches the fundamentals of small business management by blending basic management principles with tested and proven real world techniques for planning, organizing and operating a small business successfully. The course utilizes a variety of learning tools including the textbook, PowerPoint, lectures, written assignments, cases, websites and hands-on activities. 

Prerequisite: ACCT1012 OR ACCT2211
Corequisite: None

MKTG 2250 Strategic Selling and Account Management
2 2/1/0

This is an advanced sales course designed to explore and apply proven business practices that are currently being used in the field by sales professionals. Its focus is business-to-business, face-to-face personal selling. Key elements include strategic planning to prepare for sales calls, making sales calls, communicating proposed solutions, overcoming objections and closing sales. Other elements include understanding organizational structure, business-to-business buying behavior, understanding and influencing multiple decision makers. 

Prerequisite: MKTG1106 AND MKTG2204
Corequisite: None

MKTG 2290 Management, Marketing and Sales Internship
0 0/3/3

This course is designed to provide students with a valuable work experience within a business environment. This career enrichment course is designed to integrate the coursework taken and contribute to the student’s personal and/or professional career goals. Each internship is a faculty-approved, individualized experience designed with a training plan to meet the professional goals of the student. Emphasis is on providing a relevant work experience that is meaningful for the student and a benefit for the participating organization. 

Prerequisite: Program Faculty Consent.
Corequisite: None

MKTG 2292 Supervised Occupational Experience
0 0/3/3

This course is designed to provide students with an opportunity to explore career paths in the business field while gaining practical work experience. Emphasis will be placed on tailoring the experience to enhance an individual student’s professional and personal skills. This class is designed for maximum flexibility so the experience is meaningful for the student and of benefit to the participating business or organization. This experiential learning allows students to gain insight into one or more careers through job shadowing, service learning, volunteering, externships, event planning, work experience or a combination of these options. This class will include career exploration information as well as work experience to help students clarify their values, personal goals and career interests. 

Prerequisite: Instructor Approval
Corequisite: None

MKTG 2298 Small Business Plan Development
2 1/3/0

This course covers the steps in preparing a business plan. Each student creates a business plan based on a personal business selection. 

Prerequisite: None
Corequisite: None

MKTG 2400 Marketing Management
4 3/1/0

This capstone course is designed to be taken near the completion of the required marketing courses. This course is designed to integrate learning acquired in prior marketing courses with an emphasis on strategic marketing planning. This class will involve all aspects of developing a comprehensive marketing plan for a product or service. Students will work in teams to research, develop and present a marketing strategy for a new product. 

Prerequisite: BUS2206
Corequisite: None

MKTG 2404 Management Strategy
3 3/0/0

From a management perspective, students will study strategic management concepts and analytical techniques. Students will learn how to improve managerial decision-making by using a case study format to assess business opportunities and formulate effective strategies which will enhance the long-term performance of the organization. This course is intended to integrate previous program coursework. This capstone course should be taken during the student’s final semester. 

Prerequisite: ACCT1012 AND MKTG1100 AND MKTG2200 OR ACCT2211 AND MKTG1100 AND MKTG2200 OR ACCT1012 AND MKTG1100 AND MKTG2200 OR ACCT1012 AND BUS2206 AND BUS2204 AND BUS2202 AND BUS2204 OR ACCT2211 AND BUS2204 AND MKTG2200 OR ACCT2211 AND BUS2204 AND MKTG2200 OR ACCT2211 AND BUS2204 AND MKTG2200 AND MKTG2200 
Corequisite: None

MKTG 2410 Marketing, Management, and Sales Capstone
3 3/0/0

The primary role of this capstone course is to provide students an opportunity to integrate the knowledge that they have acquired in program coursework into business situations. Emphasis will be on the integration of key concepts covered in marketing, management, business and communication courses. Students will apply managerial decision making by assessing a business opportunity and formulating strategies to improve the performance of an organization. This class requires students to make connections between ideas and experiences and to synthesize and transfer learning to meaningful professional environments. 

Prerequisite: BUS2204 AND BUS2206 AND MKTG2204
Corequisite: None

MLT 1110 Phlebotomy Skills
2 1/1/0

This course is designed for phlebotomy and medical laboratory technician students. The course covers knowledge and performance of venipuncture, capillary and arterial blood draws. It also emphasizes other body fluid collection, specimen processing, point-of-care analysis and specimen storage. 

Prerequisite: Admission to either the Medical Laboratory Technician or the Phlebotomy Technician program.
Corequisite: None

MLT 1112 Clinical Phlebotomy
3 0/3/0

This course provides clinical phlebotomy experience for phlebotomy technician students in an affiliate hospital/clinic laboratory under the supervision of qualified technicians and technologists. Training includes blood and body fluid collection, processing and storage.

Prerequisite: None
Corequisite: MLT1110

MLT 1115 Basic Laboratory Techniques
2 1/1/0

This is an introductory course to phlebotomy and medical laboratory professions. Emphasis of this course includes safety, universal precautions, infection control, first aid and OSHA requirements. A discussion of the role of the phlebotomist, medical laboratory technician and other health care personnel is presented. Other topics include chemical and water quality, laboratory glassware, basic laboratory equipment, quality assurance, quality control, ordering laboratory supplies, laboratory information systems and laboratory math. This course is a corequisite or prerequisite to all other MLT courses. 

Prerequisite: Admission to either the Medical Laboratory Technician or the Phlebotomy Technician program.
Corequisite: None

MLT 1123 Immunohematology
4 3/1/0

This course is an introduction to the clinical area of blood banking. The course covers compatibility theory, principles of antigens on red blood cells and antibodies in serum of blood. The course also includes blood typing and other basic immunohematological procedures. 

Prerequisite: MLT1115 AND Admission to MLT program.
Corequisite: None

MLT 1215 Hematology
3 2/1/0

This is an introductory course for Medical Laboratory Technician students covering the production, maturation, function and abnormalities of blood cells and coagulation
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OIT</th>
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</thead>
<tbody>
<tr>
<td>MLT 1225</td>
<td>Biological Fluids</td>
<td>2</td>
<td>1/0</td>
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<tr>
<td>MLT 2127</td>
<td>Clinical Hematology</td>
<td>3</td>
<td>0/3/0</td>
</tr>
<tr>
<td>MLT 2220</td>
<td>Clinical Blood Bank</td>
<td>2</td>
<td>0/0/2</td>
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<tr>
<td>MLT 2222</td>
<td>Clinical Chemistry</td>
<td>2</td>
<td>0/2/0</td>
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<tr>
<td>MLT 2225</td>
<td>Clinical Hematology</td>
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<td>0/0/2</td>
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<tr>
<td>MLT 2226</td>
<td>Clinical Microbiology</td>
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<td>0/0/2</td>
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To maintain body homeostasis, the course covers routine hematology procedures to identify normal, abnormal and immature cells. The course also covers coagulation procedures to detect deficiencies and abnormal conditions of blood clotting.

**MLT 1225 Biological Fluids**

This is an introductory course for Medical Laboratory Technician students. The course is an overview of the urinary system including abnormalities and diseases. The course also covers collection, handling, storage and analysis of urine. The course also includes study of other body fluids including cerebral spinal fluid, amniotic fluid, serous fluid, synovial fluid, sputum, semen and feces.

**Prerequisite:** Admission to the MLT program AND MLT1115 AND MLT1111 AND Admission to the MLT program

**Corequisite:** None

**MLT 2127 Clinical Hematology**

This course is an introductory course at an affiliate hospital laboratory under the supervision of qualified laboratory personnel. Students perform tests on cells in the blood and body fluids. The course also covers principles and procedures for coagulation studies.

**Prerequisite:** ZOO1122

**Corequisite:** None

**MLT 2220 Clinical Blood Bank**

This course provides further instruction and study in the areas of hematology, phlebotomy and coagulation theory and technique. It provides the opportunity to integrate theory with practice since it is part of a supervised student experience at an affiliate health care laboratory under the supervision of qualified laboratory personnel.

**Prerequisite:** MLT1125

**Corequisite:** None

**MLT 2226 Clinical Microbiology**

This course further instruction and study in the areas of bacteriology, mycology and parasitology. It provides the opportunity to integrate theory with practice since it is part of a supervised student experience at a health care facility.

**Prerequisite:** BIOL2265

**Corequisite:** None

The course is intended to broaden the learner’s knowledge and skills in analysis and procedures performed in a health care facility laboratory. The MLT student also will develop a career plan, exploring the clinical laboratory field and relating these findings to the development of a financial plan.

**Prerequisite:** MLT1110 AND ZOO1122 AND ZOO1123

**Corequisite:** None

**MLT 2315 Immunology**

This course is intended for Medical Laboratory Technician students and other health professionals. Topics covered include principles of antigens, antibodies and their role in health, disease and serological laboratory procedures. The course emphasizes testing and disease diagnosis of disorders such as hepatitis, acquired immune deficiency syndrome, lupus, rheumatoid arthritis, Lyme disease, syphilis, infectious mononucleosis and streptococcal infections.

**Prerequisite:** MLT1125 AND MLT1115 OR ZOO1122 AND MLT1113 AND MLT1114

**Corequisite:** None

**MLT 2325 Diagnostic Chemistry**

This is an introductory course for Medical Laboratory Technician students which covers the analytical principles, techniques and correlation of results in the science of body chemistry. Other topics included in the course are instrumentation, calculations, preparations of reagents, quality assurance and quality control, specimen collection, transportation, analysis and result reporting.

**Prerequisite:** MLT1115 AND CHEM1100 AND Admission to MLT program. AND Or Chem 1101 Or Chem 1111

**Corequisite:** None

**MLT 2220 Clinical Urology**

This course provides a clinical experience in performing routine and special urology and other body fluid analysis under the supervision of laboratory personnel.

**Prerequisite:** BIOL1125 OR MLT2315

**Corequisite:** None

**MLT 2219 Clinical Chemistry and Special Chemistry**

This course provides a clinical experience in the chemistry laboratory at an affiliate hospital. Students learn to perform body chemistry methods on automated and semi-automated instruments under the supervision of qualified laboratory personnel. The course also includes clinical experience in special chemistry testing including hormones, vitamins, therapeutic drug monitoring and drugs of abuse.

**Prerequisite:** CHEM1105

**Corequisite:** None

**MLT 2221 Clinical Microbiology**

This course provides a clinical experience at an affiliate hospital that covers bacterial identification methods with laboratory personnel supervision. The course also covers immunological and serological testing of body fluids.

**Prerequisite:** CHEM1104 AND ZOO1122 AND ZOO1123 AND ZOO1126 AND BIOL1268 AND BIOL1267

**Corequisite:** None

**MLT 2222 Clinical Chemistry**

This course is a clinical experience in the chemistry department of an affiliate hospital under the supervision of qualified laboratory personnel. Students learn to perform body fluid chemistry methods on automated and semi-automated instruments. The course also includes clinical experience in special chemistry testing including hormones, vitamins, therapeutic drug monitoring and drugs of abuse.

**Prerequisite:** BIOL1125 OR MLT2315

**Corequisite:** None

**MLT 2225 Clinical Hematology**

This course provides further instruction and study in the areas of hematology, phlebotomy and coagulation theory and technique. It provides the opportunity to integrate theory with practice since it is part of a supervised student experience at an affiliate health care laboratory under the supervision of qualified laboratory personnel.

**Prerequisite:** MLT1215

**Corequisite:** None

**MLT 2226 Clinical Microbiology**

This course further instruction and study in the areas of bacteriology, mycology and parasitology. It provides the opportunity to integrate theory with practice since it is part of a supervised student experience at a health care facility.

**Prerequisite:** BIOL2265

**Corequisite:** None
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
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<th>Lec/Lab/OJT</th>
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<tbody>
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<td>MRNT 2001 Marine Internship</td>
<td>1</td>
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<td></td>
<td>This course is designed to provide the student...</td>
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<td></td>
<td>Prerequisite: TRNS1015 AND TRNS1193</td>
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<td>Corequisite: None</td>
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<tr>
<td>MRNT 2002 Marine Internship</td>
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<td>This course is designed to provide the student...</td>
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<td>Prerequisite: None</td>
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<tr>
<td>MRNT 2107 Drive Systems II</td>
<td>3</td>
<td>2/1/0</td>
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<td>This course covers the operational theory and...</td>
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<td>Prerequisite: None</td>
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<tr>
<td>MRNT 2205 Marine Advanced Fuel Systems</td>
<td>3</td>
<td>1/2/0</td>
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<td>This course covers the many types of fuel...</td>
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<td></td>
<td>Prerequisite: None</td>
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<tr>
<td>MRNT 2206 Electronic Fuel Injection (EFI) Systems</td>
<td>3</td>
<td>1/2/0</td>
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<td>This course teaches the theory of operation and...</td>
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<td>Prerequisite: MRTN2001</td>
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<td>Corequisite: None</td>
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</table>
| MRNT 2207 Electronic Fuel Injection (EFI) and Advanced Electrical Systems | 4 | 2/2/0 | This course teaches the theory of operation and service of the EFI/DFI (electronic fuel injection/direct fuel injection) systems used on sterndrive and outboard applications. The student will also gain a strong grasp of high-tech ignition systems and propulsion control. Engine service will be outlined along with seasonal service, engine preparation and inspection. Students will also focus on diagnostic procedures to increase their troubleshooting skills with the aid of laptops and scan tools. Prerequisite: None Corequisite: None MRNT 2211 Engine Service | 2 | 0/2/0 | This is a capstone course that will emphasize the perfection of skills acquired by the student during previous training in the marine program. While some new material will be covered, a majority of this course will be a review of earlier information attained but to a much deeper level than previously experienced. The student will focus on troubleshooting, repair and servicing products based upon simulated customer requests and complaints. Prerequisite: None Corequisite: None MRNT 2212 Performance Testing | 1 | 1/0/0 | This course will provide instruction in boat performance improvement. Students will study propeller construction and applications. Performance analysis for dynamometer testing and test wheels will be emphasized. Students will conduct performance tests of varied marine products. Prerequisite: None Corequisite: None MRNT 2214 Marine Internship | 3 | 0/0/3 | This course is designed to provide the student with a purposeful occupational experience in the marine field. Each internship is an individualized experience. A training plan is created for each student in conjunction with the employer to provide experience related to the skills and knowledge acquired in the student's training program. Procedures necessary for new boat preparation, motor mounting, accessories, controls and instrumentation are practiced at the internship site. Additional skills from completed courses may also be included in the training plan. Prerequisite: None Corequisite: None MRNT 2218 Advanced Electrical Diagnosis | 3 | 1/2/0 | This course covers the highly technical electrical system used on higher horsepower marine products. Student will perform adjustments and normal service procedures on live units. System troubleshooting procedures will be stressed in this course. Prerequisite: None Corequisite: None MRNT 2221 Advanced Drive Systems and Testing | 4 | 2/2/0 | This course teaches the service procedures for advanced technology drive systems used in stern-mounted vertical drives and outboards. Dual-propeller drive systems, high-speed designs and heavy-duty drive systems will be covered in this course. Complete disassembly, measurement, analysis, shining and rebuilding procedures will be taught and performed. Prerequisite: None Corequisite: None MRNT 2222 Transom and Mid-Section Service | 4 | 2/2/0 | This course teaches the various methods used to couple the engine to the vertical drive on sterndrive applications. On outboards this course covers the mid-sections. Removal and replacement, failure analysis, measurements, disassembly and assembly procedures are performed. Prerequisite: None Corequisite: None MRNT 2223 Advanced Drives | 3 | 2/1/0 | This course teaches the service procedures for advanced technology drive systems used in stern-mounted vertical drives. Dual-propeller drive systems, high-speed designs and heavy-duty drive systems will be covered in this course. Complete disassembly, measurement, analysis, shining and rebuilding procedures will be taught and performed. Prerequisite: None Corequisite: None MRNT 2224 Marine Independent Study Lab | 1 | 0/1/0 | This course is designed by the student and the instructor to provide an opportunity for the student to gain proficiency in selected competency areas and integrate the skills and knowledge gained in previous coursework. The student, with instructor approval, will prepare a Lab Activity Plan consistent with 30 hours of lab time. The plan should reflect the following course goals: student knowledge, prior work experience and student skill level. The student will complete a Daily Activity Lab worksheet that will represent work completed and prepare a Lab Activities Outcomes worksheet to determine student efforts and success at completing the Lab Activity Plan and the course. Prerequisite: None Corequisite: None MRNT 2227 Transom Plate and Mid-Sections I | 2 | 1/1/0 | This course teaches the various methods used to couple the MerCruiser engine to the vertical drive on sterndrive applications. On Mercury outboards this course covers the mid-sections. Removal and replacement, failure analysis, measurements, disassembly and assembly procedures are performed. Prerequisite: None Corequisite: None MRNT 2228 Transom Plate and Mid-Sections II | 2 | 1/1/0 | This course teaches the removal and replacement, failure analysis, measurements, disassembly and assembly procedures on the transom plates of the OMC and Volvo sterndrive applications. This course covers the removal and replacement, failure analysis, disassembly and assembly procedures of the mid-sections of Johnson, Evinrude and Yamaha outboards. Prerequisite: None Corequisite: None MRNT 2233 Engine Performance Rebuild and Diagnostics | 4 | 2/2/0 | This course covers the disassembly, inspection of serviceability and the return of the equipment to the manufacturer's specifications or to a higher performance level. Included in this course is the analysis/diagnosis of the reason for failure and the prevention of future like failures. Students are welcome to bring in their own engine for this course providing it fits the curriculum. Prerequisite: None Corequisite: None MRNT 2238 Marine Four-stroke Outboard Engine Service | 2 | 1/1/0 | This course focuses on the tuning, maintenance, diagnosis and adjustment of four-stroke outboard engines. Training will include multiple brands of four-stroke outboards and their related components. This is an excellent course to build upon for complete understanding of the four-stroke outboard. Prerequisite: None Corequisite: None MRNT 2345 Marine Project Repair | 3 | 1/2/0 | Students will learn to repair or improve personal or customer marine equipment by practicing what they will be doing as technicians in the repair field. No projects are off limits, but instructor approval of the projects is required. Prerequisite: None Corequisite: None MUSC 1112 Beginning Class Guitar | 1 | 1/0/0 | Meets MnTC Goal Area 6F. Groupitar lessons are designed for students with no guitar experience. Includes emphasis on solo and ensemble playing as well as technique and theory. Prerequisite: None Corequisite: None
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<tr>
<th>Course #</th>
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<tbody>
<tr>
<td>MUSC 1113</td>
<td>Beginning Class Voice</td>
<td>1</td>
<td>1/0/0</td>
<td>MUSC 1131</td>
<td>Civic Orchestra</td>
<td>1</td>
<td>1/0/0</td>
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<td></td>
<td>Meets MnTC Goal Area 6F. This course provides class instruction in the healthy use of the voice in singing and speaking. The course includes an emphasis on solo and ensemble performance as well as improvisation, technique and theory. Recommended for beginning voice students, for non-signers who would like to learn to sing, for anyone who uses his/her voice but especially for music, theater, speech, therapy and elementary education majors. A maximum of two semesters may be taken for credit.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6F. The Civic Orchestra is a community orchestra that performs one concert each semester. The group meets one evening per week on a regularly scheduled basis. May be repeated for credit.</td>
<td>None</td>
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<td>Prerequisite: None</td>
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<td>Corequisite: None</td>
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<tr>
<td>MUSC 1114</td>
<td>Beginning Class Piano</td>
<td>2</td>
<td>2/0/0</td>
<td>MUSC 1135</td>
<td>Voice Ensemble</td>
<td>1</td>
<td>1/0/0</td>
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<td>Meets MnTC Goal Area 6F. Group piano lessons are designed for students with no piano experience. The course includes an emphasis on solo and ensemble playing as well as improvisation, technique and theory.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6F. The voice ensemble is an auditioned choir (from the M State Concert Choir) meeting two hours per week on a regularly scheduled basis. This group will study and prepare music from various musical periods and geographic regions and performs a minimum of one concert each semester. This group also participates in campus life venues as they arise, the MCC Fine Arts Festival and occasional area tours. May be repeated for credit.</td>
<td>None</td>
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<td></td>
<td>Prerequisite: None</td>
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<td>Corequisite: None</td>
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<tr>
<td>MUSC 1115</td>
<td>America's Musical Heritage</td>
<td>3</td>
<td>3/0/0</td>
<td>MUSC 1141</td>
<td>Concert Choir</td>
<td>1</td>
<td>1/0/0</td>
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<td></td>
<td>Meets MnTC Goal Areas 6 and 7. This survey course for the general college student introduces the elements, structural designs and historical styles of music. Emphasis is placed on expansion of listening skills, music experiences, field research and cultural contexts of American music styles, including jazz, country, R&amp;B, hip hop, rap, salsa, reggae and urban folk styles.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6F. The M State choir is a non-auditioned group that meets four times per week on a regularly scheduled basis. The group will study and prepare music from various musical periods and geographic regions and performs a minimum of one concert each semester. The group will also participate in campus life venues as they arise, the MCC Fine Arts Festival and occasional area tours. May be repeated for credit.</td>
<td>None</td>
<td>None</td>
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<td></td>
<td>Prerequisite: None</td>
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<td>Corequisite: None</td>
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<td>Corequisite: None</td>
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<tr>
<td>MUSC 1116</td>
<td>World Music</td>
<td>3</td>
<td>3/0/0</td>
<td>MUSC 1145</td>
<td>Chamber Chorale</td>
<td>1</td>
<td>1/0/0</td>
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<td></td>
<td>Meets MnTC Goal Areas 6 and 8. This survey course for the general college student introduces the elements, structural designs and historical styles of music. Emphasis is placed on expansion of listening skills and musical experiences with music of the Western notated tradition (classical music), Native America, Africa, India, Latin America, Asia and Eastern Europe.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6F. The M State Chamber Chorale is an auditioned community chorus that performs one concert of choral/orchestral music each semester. The group meets one evening per week on a regularly scheduled basis. May be repeated for credit.</td>
<td>None</td>
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<td></td>
<td>Prerequisite: None</td>
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<td>Corequisite: None</td>
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<td>Corequisite: None</td>
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<tr>
<td>MUSC 1117</td>
<td>Beginning Class Guitar</td>
<td>2</td>
<td>2/0/0</td>
<td>MUSC 1150</td>
<td>History of Jazz</td>
<td>3</td>
<td>3/0/0</td>
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<td></td>
<td>Meets MnTC Goal Area 6F. Group guitar lessons are designed for students with no guitar experience. Includes emphasis on solo and ensemble playing as well as technique and theory.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6. Through jazz music itself, students will learn about the styles within jazz and the prominent performers from the birth of the blues and ragtime through jazz-rock fusion to the new age, smooth, acid and hip-hop jazz styles of today. Jazz music is uniquely American in origin, and the effects that society and jazz music have had on each other will be explored.</td>
<td>None</td>
<td>None</td>
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<td>Prerequisite: None</td>
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<td>Corequisite: None</td>
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<tr>
<td>MUSC 1118</td>
<td>Introduction to Music Technology</td>
<td>3</td>
<td>3/0/0</td>
<td>MUSC 1151</td>
<td>Individual Voice Lessons</td>
<td>1</td>
<td>1/0/0</td>
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<td></td>
<td>Meets MnTC Goal Area 6. This course introduces the principal topics of music technology: acoustics, computers, MIDI, digital audio, and tools for music production and scoring. Hands-on experience will be used extensively to enhance understanding. This course will serve as a springboard to further study and exploration of hardware and software tools for music creation.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6F. Students interested in individual voice lessons should contact the music department so that instruction can be arranged. There is an additional fee. May be repeated for credit.</td>
<td>None</td>
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<td>Prerequisite: None</td>
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<td>Corequisite: None</td>
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<tr>
<td>MUSC 1120</td>
<td>Basic Theory and Musicianship I</td>
<td>3</td>
<td>3/0/0</td>
<td>MUSC 1156</td>
<td>Music Business: Creating and Promoting Music</td>
<td>3</td>
<td>3/0/0</td>
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<td></td>
<td>Meets MnTC Goal Areas 2 and 6. This course provides basic approaches to the study of music in the Western notated tradition from the 17th century to the present day. It clarifies the fundamental musical elements of melody, harmony, rhythm and form, with emphasis in the tonic-dominant harmony. The course involves analysis and composition and must be taken concurrently with MUSC 1123.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6. Students study and prepare music in various contemporary styles. Special emphasis will be given to jazz improvisation as an integral part of this music. Enrollment is open to any instrumentalist at the discretion of the instructor. May be repeated for credit.</td>
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<td>None</td>
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<td>Prerequisite: None</td>
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<td>Corequisite: None</td>
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<tr>
<td>MUSC 1122</td>
<td>Basic Theory and Musicianship II</td>
<td>3</td>
<td>3/0/0</td>
<td>MUSC 1156</td>
<td>Jazz Ensemble</td>
<td>1</td>
<td>1/0/0</td>
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<tr>
<td></td>
<td>Meets MnTC Goal Areas 2 and 6. This course provides basic approaches to the study of music in the Western notated tradition as the organization and interaction of musical elements: melody, harmony, rhythm, form and color, with emphasis in the tonic-dominant harmony. Includes analysis and composition. It must be taken concurrently with MUSC 1120.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6. The Jazz Ensemble meets on a weekly basis, studies and prepares music in the various styles of jazz and performs one concert each semester. Each ensemble will participate in campus life venues, festivals and occasional area tours. Small ensemble performances will also be included in this experience. May be repeated for credit.</td>
<td>None</td>
<td>None</td>
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<td></td>
<td>Prerequisite: MUSC1121</td>
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<td></td>
<td></td>
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<tr>
<td>MUSC 1123</td>
<td>Sight Singing and Ear Training I</td>
<td>1</td>
<td>1/0/0</td>
<td>MUSC 1164</td>
<td>Concert Band</td>
<td>1</td>
<td>1/0/0</td>
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<td>Meets MnTC Goal Area 6F. This course is designed to improve skills in two areas: 1) to recognize and notate tonal melodies and rhythmic patterns, and 2) to reproduce at sight what is notated. It must be taken concurrently with MUSC 1121.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6. The M State Concert Band is an instrumental group that meets three times per week on a regularly scheduled basis. The group will study and prepare music from a wide range of composers and styles and performs a minimum of one concert each semester. This ensemble will participate in sporting events, campus life venues and other events. May be repeated for credit.</td>
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<td>None</td>
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<td>Prerequisite: None</td>
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<tr>
<td>MUSC 1124</td>
<td>Sight Singing and Ear Training II</td>
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<td>MUSC 1168</td>
<td>Pep Band</td>
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<tr>
<td></td>
<td>Meets MnTC Goal Area 6F. This course is designed to improve skills in two areas: 1) to recognize and notate tonal melodies and rhythmic patterns, and 2) to reproduce at sight what is notated. It must be taken concurrently with MUSC 1121.</td>
<td>None</td>
<td>None</td>
<td></td>
<td>Meets MnTC Goal Area 6F. The M State Pep Band is an instrumental group that meets two times per week on a regularly scheduled basis. The group will study and prepare music from a wide range of composers and styles and performs a minimum of one concert each semester.</td>
<td>None</td>
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<td></td>
<td>Prerequisite: None</td>
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<tr>
<td>MUSC 1181</td>
<td>Private Instrumental Lessons</td>
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<tr>
<td>MUSC 1185</td>
<td>Private Music Composition Lessons</td>
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<tr>
<td>MUSC 1191</td>
<td>Individual Piano Lessons</td>
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<td>MUSC 2223</td>
<td>Sight Singing and Ear Training III</td>
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<td>MUSC 2224</td>
<td>Sight Singing and Ear Training IV</td>
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<td>MUSC 2231</td>
<td>Advanced Theory and Musicship III</td>
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<td>MUSC 2232</td>
<td>Advanced Theory and Musicship IV</td>
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<td>MUSC 2251</td>
<td>Individual Voice Lessons</td>
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<td>MUSC 2285</td>
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<td>MUSC 2291</td>
<td>Individual Piano Lessons</td>
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**Course Descriptions**

**MUSC 1181 Private Instrumental Lessons**

Meets MnTC Goal Area 6F. Individual woodwind, brass, percussion, string and guitar lessons are offered, subject to instructor availability. Students should contact the music department to arrange instruction. There is an additional fee. May be repeated for credit.

- **Prerequisite:** None
- **Corequisite:** None

**MUSC 1185 Private Music Composition Lessons**

Meets MnTC Goal 6. Individual music composition and advanced theory discussion and lessons are offered, subject to instructor availability. Students should contact the music department to arrange instruction. There is an additional fee, and the course may be repeated for credit.

- **Prerequisite:** None
- **Corequisite:** None

**MUSC 1191 Individual Piano Lessons**

Meets MnTC Goal Area 6F. Students should contact the music department to arrange individual piano lessons. There is an additional fee. May be repeated for credit.

- **Prerequisite:** None
- **Corequisite:** None

**MUSC 2223 Sight Singing and Ear Training III**

Meets MnTC Goal Area 6F. This course is designed to improve skills in two areas: 1) to recognize and notate tonal melodies and rhythmic patterns, and 2) to reproduce at sight what is notated. It must be taken concurrently with MUSC 2231.

- **Prerequisite:** MUSC1124
- **Corequisite:** None

**MUSC 2224 Sight Singing and Ear Training IV**

Meets MnTC Goal Area 6F. This course is designed to improve skills in two areas: 1) to recognize and notate tonal melodies and rhythmic patterns, and 2) to reproduce at sight what is notated. It must be taken concurrently with MUSC 2223.

- **Prerequisite:** MUSC2223
- **Corequisite:** None

**MUSC 2231 Advanced Theory and Musicship III**

Meets MnTC Goal Areas 2 and 6. This course offers continued study and application of concepts from MUSC 1121 and 1122, including functional harmony, basic structure and analysis, chromatic harmony and an introduction to 20th century harmonic practices. Course includes comparisons of music from various stylistic periods and beginning studies in counterpoint.

- **Prerequisite:** MUSC1122 AND MUSC1124
- **Corequisite:** None

**MUSC 2232 Advanced Theory and Musicship IV**

Meets MnTC Goal Areas 2 and 6. This course provides continued study and application of concepts from MUSC 1121 and 1122, including functional harmony, basic style and form analysis, chromatic harmony and an introduction to 20th century harmonic practices. Course includes comparisons of music from various stylistic periods and beginning studies in counterpoint.

- **Prerequisite:** MUSC2231
- **Corequisite:** None

**MUSC 2251 Individual Voice Lessons**

Meets MnTC Goal Area 6F. Individual vocal lessons of one hour per week are open to advanced students with instructor’s consent. Course is required of instrumental performance or education majors and includes required performances. Students should contact the music department to arrange instruction. There is an additional fee, and it may be repeated for credit.

- **Prerequisite:** None
- **Corequisite:** None

**MUSC 2285 Advanced Music Composition**

Meets MnTC Goal 6. Individual advanced music composition and advanced theory discussion and lessons. Subject to instructor availability. Students should contact the music department to arrange instruction. Additional fee. May be repeated for credit.

- **Prerequisite:** MUSC1185
- **Corequisite:** None

**MUSC 2291 Individual Piano Lessons**

Meets MnTC Goal Area 6F. Individual piano lessons of one hour per week are open to advanced students with instructor’s consent and required of piano performance or piano pedagogy majors. Course includes additional studio classes and required performances at the instructor’s discretion. Interested students should contact the music department to arrange instruction. There is an additional fee. May be repeated for credit.

- **Prerequisite:** None
- **Corequisite:** None

**NURS 1400 Introduction to Professional Nursing**

This course introduces students to the concepts of professional nursing. It includes the evolution of nursing practice, the scope of practice for health care teams, creating plans of care that integrate quality and safety for diverse patient populations, professional behavior, therapeutic communication, documentation and medical terminology.

- **Corequisite:** Must be eligible to take English 1101 and Math 1114 AND acceptance into the Associate Degree Nursing Program AND experience as a Nursing Assistant AND current American Heart Association Basic Life Support AND current, clear Minnesota Department of Health criminal background check AND current, clear national background check AND up-to-date immunizations and health form.

**NURS 1406 Nursing Fundamentals I**

This course prepares students to provide safe, therapeutic nursing care to diverse patient populations across the age span. Content includes asepsis and infection control, holistic assessment, basic pharmacologic principles and concepts, safe medication administration, pain management, complementary/alternative therapies and perioperative nursing care. This course also integrates the content and skills necessary to promote and maintain health and wellness of the neurological, integumentary, sensory and musculoskeletal systems.

- **Corequisite:** Must be eligible to take English 1101 and Math 1114 AND acceptance into the Associate Degree Nursing Program AND experience as a Nursing Assistant AND current American Heart Association Basic Life Support AND current, clear Minnesota Department of Health criminal background check AND current, clear national background check AND up-to-date immunizations and health form.

**NURS 1413 Nursing Clinical I**

This course promotes the application of fundamental skills while providing basic clinical care to a diverse group of patients. The course incorporates the concepts of quality and safe patient care, professional behavior, therapeutic communication and safe medication administration.

- **Corequisite:** BIOC2267 AND BIOC2268 AND ENGL1101 AND NURS1400 AND NURS1401 AND NURS1402 AND BIOC2260 AND BIOC2261 AND PSYC2222 AND experience as a Nursing Assistant AND current American Heart Association Basic Life Support AND current, clear Minnesota Department of Health criminal background check AND current, clear national background check AND up-to-date immunizations and health form.

**NURS 1416 Nursing Fundamentals II**

This course prepares students to provide safe, therapeutic nursing care to diverse patient populations across the age span. The course also integrates the content and skills necessary to promote and maintain health and wellness of the gastrointestinal, metabolic, immune, hematologic, cardiovascular, respiratory and urinary systems as well as fluid and electrolyte balance.

- **Corequisite:** BIOC2260 AND BIOC2261 AND NURS1400 AND NURS1401 AND NURS1402 AND BIOC2267 AND BIOC2268 AND ENGL1101 AND PSYC2222

**NURS 1426 Reproductive Health**

This course introduces antepartum, intrapartal, postpartal and neonatal nursery care for the uncomplicated mother and infant. Holistic care and wellness promotion are emphasized, including needs of the family. Nursing care is examined for diverse patients of both genders across the lifespan to maintain and promote reproductive wellness; this includes normal sexuality, management of fertility and reproductive health promotion.

- **Corequisite:** Must be examined for nursing care and promote wellness for pediatric patients, considering variations based on normal growth and development.

**NURS 2120 Professional Nursing Pharmacology**

This course will provide the nursing student with specific considerations related to medication administration for drug classifications related to disease processes. Actions, therapeutic uses, adverse effects and interactions of drug categories will be discussed. Nursing considerations for categories of common drug classifications will be covered. Legal and ethical considerations for the professional nurse in regard to drug administration will be studied.

- **Corequisite:** BIOC2263 AND NURS1400 AND NURS1406 AND BIOC2260 AND BIOC2261 AND BIOC2267 AND BIOC2268

**NURS 2410 Role Transition**

This course prepares the practical nurse to transition into the professional nursing role. Concepts of legal and ethical considerations in practice, holistic assessment, the nursing process and development of individualized plans of care will be explored while integrating informatics, evidence-based practice, patient-centered care, safety and quality improvement.

- **Corequisite:** Graduate of an approved Practical Nursing program and admitted to the Associate Degree in Nursing-Advanced Standing Option program AND MATH1020 or assess into a minimum of MATH1114 AND ENGL0096/97 or assess into ENGL1101 AND current American Heart Association Basic Life Support AND current, clear Minnesota Department of Health criminal background check AND current, clear national background check AND up-to-date immunizations and health form.

**NURS 2426 Reproductive Disorders**

This course analyzes nursing care of antepartal, intrapartal, postpartal and neonatal conditions for the mother and infant with the focus on complications, illnesses or
### COURSE DESCRIPTIONS

#### NURS 2437 Nursing Clinical II
- **Course Title:** Nursing Clinical II
- **CR:** 4
- **Lec/Lab/OJT:** 0/0/4
- **Prerequisite:** NURS 2415 AND NURS 2416 AND NURS 2426 AND BIOL 2262 AND CHEM 1100 OR LPN AND NURS 2410
- **Corequisite:** None
- **Description:** This clinical course provides the professional nursing student with opportunities to utilize the nursing process in providing individualized patient-centered care to diverse patient populations. An emphasis is placed on evidence-based nursing care and clinical judgment skills, personal identity and behavior, teamwork and collaboration, holism, patient-centered care, safety and quality improvement will be incorporated.

#### NURS 2438 Restorative Nursing I
- **Course Title:** Restorative Nursing I
- **CR:** 4
- **Lec/Lab/OJT:** 0/4/0
- **Prerequisite:** NURS 2415 AND NURS 2416 AND NURS 2426 AND BIOL 2262 AND CHEM 1100 OR LPN AND NURS 2410
- **Corequisite:** None
- **Description:** Restorative Nursing I is designed to prepare students to plan nursing care for diverse patients experiencing disorders of the neurological/sensory, musculoskeletal, endocrine, immunological, hematological and gastrointestinal systems. Emphasis is placed on patient-centered care, nursing judgment/evidence-based care, safety and pharmacology.

#### NURS 2448 Restorative Nursing II
- **Course Title:** Restorative Nursing II
- **CR:** 3
- **Lec/Lab/OJT:** 0/0/3
- **Prerequisite:** NURS 2438 AND NURS 2437 AND NURS 2426 AND NURS 2455 AND BIOL 2202
- **Corequisite:** None
- **Description:** This course is designed to prepare students to plan nursing care for diverse patients experiencing disorders of the cardiovascular, respiratory, renal, fluids/electrolytes/acid/base and integumentary systems. Emphasis is placed on patient-centered care, nursing judgment/evidence-based care, safety and pharmacology.

#### NURS 2464 Nursing Leadership
- **Course Title:** Nursing Leadership
- **CR:** 1
- **Lec/Lab/OJT:** 0/1/0
- **Prerequisite:** NURS 2437
- **Corequisite:** None
- **Description:** This course is designed to prepare students for their role as nurse leaders. Areas of focus include knowledge and skills necessary to make decisions regarding setting priorities, delegation, management, supervision, teaching, continuity of care, legal parameters of nursing practice and ethical issues in nursing.

#### OPT 1100 Introduction to Fiber Optics
- **Course Title:** Introduction to Fiber Optics
- **CR:** 2
- **Lec/Lab/OJT:** 0/2/0
- **Prerequisite:** None
- **Corequisite:** None
- **Description:** This course introduces the student to industry standards governing fiber to the desk (FTTD), fiber to the home (FTTH) and local/ wide area network (LAN/WAN) fiber networks, and further introduces the student to basic fusion and mechanical splicing. Students will learn the basics of how to identify fiber types, recognize various connectors used in fiber installation and install, terminate, splice and properly test installed fiber cable to existing standards.
<table>
<thead>
<tr>
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<th>Course Title</th>
<th>CR</th>
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<td>PDEV 1100</td>
<td>College Success Seminar</td>
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<td>PDEV 1101</td>
<td>Campus Life - Active Living</td>
<td>3</td>
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<td>PDEV 1102</td>
<td>Contemporary Career Search</td>
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<td>PDEV 1113</td>
<td>Career Life Planning</td>
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<td>PE 1109</td>
<td>Wellness Skills</td>
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<tr>
<td>PE 1141</td>
<td>Introduction to Strength Training</td>
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<tr>
<td>PE 1190</td>
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<td>PE 1192</td>
<td>Varsity Basketball</td>
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<tr>
<td>PE 1193</td>
<td>Varsity Baseball</td>
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<td>Varsity Volleyball</td>
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<td>PE 1196</td>
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<td>PE 2111</td>
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<td>PE 2112</td>
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<td>PE 2114</td>
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<td>PE 2145</td>
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<tr>
<td>PE 2190</td>
<td>Varsity Football II</td>
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**Course Descriptions**

**PDEV 1100 College Success Seminar**
This course is designed to help first-year M State students develop and transition into college life. Topics include, but are not limited to, accessing college resources, understanding college guidelines, expectations and demands of being a college student, and community awareness. The class also will cover money management, proper nutrition, and stress management. Students will participate in on-campus activities and community tours, and be exposed to expert guest speakers from the college and community. Students will set goals, examine learning styles and put in place a strategy for collegiate success.

**Prerequisite:** None
**Corequisite:** None

**PDEV 1101 Campus Life - Active Living**
This course is designed to help M State students strengthen and develop critical and creative thinking skills associated with a college academic experience, make social adaptations to a new environment and make connections with faculty, staff, and resource offices. Topics include an understanding of individual risks and barriers, time management and personal responsibility. This class also is designed to develop student awareness of health in the freshman year to create a healthy, holistic lifestyle. Students will be able to deepen their understanding with regards to social, emotional, intellectual, vocational and physical elements of self-development. Students will also participate in physical activities that promote a healthy, drug-free on-campus environment. Additional topics to be discussed may include but are not limited to goal setting, stress management, and drug and alcohol use.

**Prerequisite:** None
**Corequisite:** None

**PDEV 1102 Contemporary Career Search**
This course covers contemporary career topics as employer expectations, job market trends and networking, and various aspects of the employment search process including legal and ethical issues. To apply their knowledge of the employment process, students will develop resumes, letters and applications, as well as identify and use effective interviewing techniques. This course emphasizes a comprehensive knowledge of career processes that will serve students throughout their working lives.

**Prerequisite:** None
**Corequisite:** None

**PDEV 1113 Career Life Planning**
This course is designed to assist students in developing career exploration skills and strategies through self-exploration, cultural perceptions, and career and major identification. Students will identify major/career possibilities.

**Prerequisite:** None
**Corequisite:** None

**PE 1109 Wellness Skills**
This course is designed to introduce wellness concepts and provide the knowledge and skills necessary to develop a healthy physical, mental and social lifestyle. Students will actively seek to develop and maintain a balance of these elements through increased knowledge of appropriate activities including positive and responsible belief systems and choices. Topics may include anatomy, physiology, kinesiology, emotional/mental health, nutrition, fitness, weight management, drug use/abuse, planning and commitment to change. Course includes physical activity participation by students.

**Prerequisite:** None
**Corequisite:** None

**PE 1130 Beginning Golf**
The purpose of the course is to cover the fundamentals of golf necessary to play at the beginning recreational level. Topics of discussion include rules, etiquette, equipment and terminology. Students will be taught in the classroom and on the golf course. An additional fee will be assessed.

**Prerequisite:** None
**Corequisite:** None

**PE 1141 Introduction to Strength Training**
This course is an introduction to weight lifting, weight room safety, periodization, energy systems, nervous system, muscular system and how this information is used to formulate a weight training program as a means to achieve muscle strength, muscular endurance, tone or size. This class may be repeated once for credit.

**Prerequisite:** None
**Corequisite:** None

**PE 1190 Varsity Football**
The course presents students with the opportunity to participate in the sport of football at the college level. The student will have opportunities in a variety of situations to learn about and develop their self-image, characteristics of high achievement and physical skills in a competitive environment. May be repeated once for credit.

**Prerequisite:** The participants of this class must be approved by the head football coach.
**Corequisite:** None

**PE 1192 Varsity Basketball**
The course presents students with numerous opportunities in a variety of situations to learn about and develop their self-image, characteristics of high achievement and physical skills in a competitive basketball environment. This class may be repeated once for credit.

**Prerequisite:** None
**Corequisite:** None

**PE 1193 Varsity Baseball**
This course presents students with numerous opportunities in a variety of situations to learn and develop the characteristics of high achievement and physical skills in a competitive intercollegiate baseball setting.

**Prerequisite:** The participants of this course must be approved by the head coach.
**Corequisite:** None

**PE 1194 Varsity Golf**
This course presents students with numerous opportunities in a variety of situations to learn about and develop their self-image, characteristics of high achievement and physical skills in a competitive golf environment. This class may be repeated once for credit.

**Prerequisite:** None
**Corequisite:** None

**PE 1197 Varsity Volleyball**
This course presents students with numerous opportunities in a variety of situations to learn and develop physical skills in a competitive intercollegiate volleyball setting.

**Prerequisite:** The participants of this course must be approved by the head coach.
**Corequisite:** None

**PE 1199 Varsity Softball**
This course is for students who wish to compete in varsity softball at the collegiate level. The course is designed to introduce students with opportunities in a variety of situations to learn and develop characteristics of high achievement and physical skills in a competitive environment.

**Prerequisite:** The participants of this course must be approved by the head coach.
**Corequisite:** None

**PE 2100 Introduction to Sports Management**
This course is designed to introduce the student to the dynamic nature of sports management. Topics may cover sports within our culture, sports enterprise, communication, public relations and use of social media. Sport event themes will be covered and include topics such as amateur sports participation, for-profit sports participation, tournament operations and sporting goods.

**Prerequisite:** None
**Corequisite:** None

**PE 2111 Sports Facilities Management**
This course will provide students with an introduction to the planning and management of sports facilities. Students will examine legal aspects of hosting sporting events. Topics will include security, liability, safety, maintenance, signage and operating facilities.

**Prerequisite:** None
**Corequisite:** None

**PE 2112 Applied Coaching: Football**
This course provides the student with the knowledge to teach the fundamentals of football. Emphasis will be on rules, technique, strategy, game plan and practice planning. Other topics will include safety and proper equipment usage.

**Prerequisite:** None
**Corequisite:** None

**PE 2114 Applied Coaching: Volleyball**
This course provides students with the knowledge to teach the fundamentals of volleyball. Emphasis will be on rules, technique, strategy, game plan and practice planning. Other topics will include safety and proper equipment usage.

**Prerequisite:** None
**Corequisite:** None

**PE 2115 Applied Coaching: Basketball**
This course provides the students with the knowledge to teach the fundamentals of basketball. Emphasis will be on rules, technique, strategy, game plan and practice planning. Other topics will include safety and proper equipment usage.

**Prerequisite:** None
**Corequisite:** None

**PE 2145 Advanced Strength Training**
This course is designed for students who have an advanced knowledge and skill of strength training. Students will be expected to employ safety in the weight room. Students will develop a needs analysis plan that includes best training practices and goals. Students also will construct a principles of progression outline and develop and implement an individual strength training program that can be documented for progression of training and measurement of goals.

**Prerequisite:** PE 1141
**Corequisite:** None

**PE 2190 Varsity Football II**
This course is for student athletes who are in their second year of football athletic eligibility. The student athletes will be provided with an enhanced experience that comes with being a second-season participant. The student athletes may have an expanded leadership role, mentoring opportunities for freshman students and an opportunity to promote themselves for athletic recruitment to a different institution.

**Prerequisite:** Approval by Instructor
**Corequisite:** None
PE 2192 Varsity Basketball II  1  0/1/0
This course is for student athletes who are in their second year of varsity basketball eligibility. Student athletes will be provided with an expanded experience that comes with being a second-season participant. The student athlete will have an expanded leadership and mentoring role.
Prerequisite:  The participants of this class must be approved by the head basketball coach.
Corequisite:  None

PE 2193 Varsity Baseball II  1  0/1/0
This course is for student athletes who are in their second year of baseball athletic eligibility. The student athlete will be provided with an expanded experience that comes with being a second-year participant. The student athlete may have an expanded leadership role, mentoring opportunities for freshman students and an opportunity to promote themselves for recruitment to a different institution.
Prerequisite:  Approval by instructor is required.
Corequisite:  None

PE 2194 Varsity Golf II  1  0/1/0
This course is for student athletes who are in their second year of varsity golf eligibility. Student athletes will be provided with an expanded experience that comes with being a second-season participant. The student athlete may have expanded leadership and mentoring roles.
Prerequisite:  The participants of this class must be approved by the head golf coach.
Corequisite:  None

PE 2197 Varsity Volleyball II  1  0/1/0
This course is for student athletes who are in their second year of varsity volleyball eligibility. Student athletes will be provided with an expanded experience that comes with being a second-season participant. The student athlete may have an expanded leadership and mentoring role.
Prerequisite:  The participants of this class must be approved by the head volleyball coach.
Corequisite:  None

PE 2199 Varsity Softball II  1  0/1/0
This course is for student athletes who are in their second year of varsity softball eligibility. Student athletes will be provided with an expanded experience that comes with being a second-season participant. The student athlete may have an expanded leadership and mentoring role.
Prerequisite:  The participants of this class must be approved by the head softball coach.
Corequisite:  None

PE 2201 Lifeguard Water Safety  2  1/1/0
This course focuses on lifeguarding skills, first aid, cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED) skills. This course has no prerequisites, but students will be required to demonstrate strong swimming skills within the first week of the course, based on Red Cross definitions. Students who complete this course will be eligible to take the Red Cross lifeguard exam.
Prerequisite:  None
Corequisite:  None

PE 2211 Water Safety Instructor  2  1/1/0
This course prepares students to become water safety instructors and to teach Red Cross swimming, water safety and water-rescue skills to all levels and ages. Students will be introduced to all swimming strokes. Physical conditioning is stressed. Students who complete this course will be eligible to take the Red Cross water safety Instructor exam.
Prerequisite:  Students must be at least 16 years old by the last day of the course.
Corequisite:  None

PE 2240 Athletic Injury, Care and Prevention  2  2/0/0
This course is offered to coaches interested in sports medicine and students interested in coaching and/or athletic training. It is designed to enhance the student’s knowledge and performance in sports medicine. The course will cover athletic injury prevention measures, injury care and management, basic injury assessment, nutrition and specific athletic injuries and related problems.
Prerequisite:  None
Corequisite:  None

PE 2241 Principles of Coaching  3  3/0/0
This course is designed to introduce students to athletic coaching philosophies, basic coaching principles of team and individual sports and theories involved in coaching. Emphasis will be on legal issues surrounding coaching, developing coaching philosophies, exploring diversity in coaching, and rules and regulations associated with coaching at different levels.
Prerequisite:  None
Corequisite:  None

PE 2254 Sports in Society  3  3/0/0
This course involves a discussion of the impact of sports in society and the values we place on sports. The course will explore the values, virtues, consequences, rights and responsibilities of sports in our culture. The course is designed to improve the understanding of legal, racial, academic and moral issues of sports and athletics.
Prerequisite:  None
Corequisite:  None

PE 2255 Aquatic Outdoor Recreation  2  1/1/0
During this course, four to six days are spent on a wilderness field trip. Major topics covered are camping and camping equipment, camp food and nutrition, canoeing, fishing, nature study and woodlore, safety, map and compass, and outdoor philosophy.
Prerequisite:  None
Corequisite:  None

PHIL 1130 Applied and Professional Ethics  3  3/0/0
Meets MnTC Goal Areas 2 and 9. This course is designed primarily for second-year student athletes to enhance leadership and mentoring skills and to promote community relations while participating in athletics. Students will have expanded leadership roles within their respective sports by mentoring first-year student athletes in academics and life skills, key components to college success, community adaptation and leadership, time management skills and the importance of time. The course will also be required to participate in a community-based service learning activity designed by the instructor to positively influence and market the Spartan Athletics image and brand.
Prerequisite:  This course requires the approval of the instructor prior to enrollment.
Corequisite:  None

PHIL 1135 Critical Thinking  3  3/0/0
This course covers logical and critical thinking, the definition of argument, the identification of common argument fallacies, the creation of cogent arguments and the acquisition of skills needed to translate clearly constructed arguments into argumentative essays on contemporary topics. Students will study inductive and deductive styles of thinking, valid and invalid argument forms, the differences between facts and values, judgment and belief, and the importance of linguistic definition plays in the strong arguments.
Prerequisite:  None
Corequisite:  None

PHIL 1201 Ethics  3  3/0/0
Meets MnTC Goal Areas 2, 6 and 9. This course is an introduction to the topic of ethics. In this course, the following questions are examined: What is ethics? How do we make ethical decisions? Are things that are legally right necessarily right? Should we consider our own interests when making ethical decisions? Are things ethically right simply because God says they are right? If our culture says something is ethically right, does that mean it is ethically right? The course also examines numerous topical ethical issues such as racism, terrorism and censorship.
Prerequisite:  None
Corequisite:  None

PHIL 1211 Introduction to Philosophy  3  3/0/0
Meets MnTC Goal Areas 2 and 6. This course is an introduction to the basic branches of philosophy including metaphysics (the study of existence and what existence means), epistemology (the study of knowledge and how we come to understand), ethics (the study of what we should do), politics (the study of how societies should exercise force) and aesthetics (the study of beauty and art). Students can expect to explore their own understanding of the world and test it against the classical works of Western philosophy.
Prerequisite:  None
Corequisite:  None

PHIL 2220 Environmental Ethics  3  3/0/0
Meets MnTC Goal Areas 9 and 10. This course examines the basic positions and concepts within the field of environmental philosophy. A primary emphasis will be placed upon understanding our moral obligations toward the natural environment. Representative course topics may include the following: What is nature? Do humans have direct duties toward the natural world? What is deep ecology? Should we conserve or preserve our natural environment? Do intrinsic values exist in nature? Is a land ethic possible? What is ecocentrism?
Prerequisite:  None
Corequisite:  None

PHIL 2224 Philosophy of Religion  3  3/0/0
Meets MnTC Goal Areas 2, 6 and 8. This course explores proposed answers to the question: What role can religion play when considering questions about the meaning of life? The course will consider the traditional arguments for the existence of God as expressed by Western thinkers as well as non-Western efforts to reconcile order and disorder in the universe. The course will focus on the relationship between faith and reason and will reflect on the nature of religious experience and how diverse cultures express various ways of knowing about the divine.
Prerequisite:  None
Corequisite:  None

PHIL 2225 Bioethics  3  3/0/0
Meets MnTC Goal Areas 2 and 9. This course explores ethical issues that arise from developments in science and technology (e.g. genetic engineering, cloning, patent rights) as well as look at the philosophical underpinnings of current scientific research and how philosophy is different from science and the law.
Prerequisite:  None
Corequisite:  None

minnesota.edu
PHRM 2230 Existentialism 3 3/0/0
Meets MnTC Goal Area 6. This course provides an introduction to existential philosophy, explorations of key existentialist ideas and discussions of how existential thought might be applied to such themes as freedom, existence, despair, authenticity, alienation and death. Existentialism, as the name implies, emphasizes existence (that is, the over existence what one is). The most famous definition of existentialism was articulated by Jean-Paul Sartre, who called it the theory that existence precedes essence. In other words, you are what you make yourself to be - you create your essence as you go along. The course will look at influential existentialists from Kierkegaard to Sartre and Camus.
Prerequisite: None
Corequisite: None

PHLM 2235 Symbolic Logic 3 3/0/0
Meets MnTC Goal Area 4. This course is designed as an introduction to symbolic logic, as well as the nature of language and multiple methodologies for proving arguments. This course will focus on formal systems of logic and deductive validity and will include proofs, methods and translation in sentential and predicate logic. The course will also have introduction to meta-theory and the extensions of logic and will explore inductive logic.
Prerequisite: None
Corequisite: None

PHLM 2240 Non-Western Philosophical Perspectives 3 3/0/0
Meets MnTC Goal Areas 6 and 8. This course explores the standard introduction to philosophy and questions (e.g. does God exist; are humans completely physical beings of we can have knowledge; how can we differentiate between right and wrong; do we have free will; etc.) mainly from the standpoint of non-Western thinkers. We will consider how these questions have been pursued and answered in historically-dominated cultures (i.e. Asian, African, Latin American and indigenous) and compare and contrast our findings with the dominant Western philosophies. After taking this course, students should be better able to place contemporary philosophical issues in a global context and be better able to interact with and understand members of a diverse society.
Prerequisite: None
Corequisite: None

PHLM 2300 Political and Social Philosophy 3 3/0/0
Meets MnTC Goal Areas 5 and 7. This course addresses issues with regards to a critical examination of some philosophical problems of politics and evaluation of social and political organizations over the course of human history. The course will explore a detailed philosophical analysis of the writings (both classical and contemporary) about social and political concepts such as freedom, democracy, sociology, capitalism, fascism and anarchism with a particular interest in the implications of these concepts. Questions concerning the nature, justification and limits of political power will be explored. In addition to this, theories of distributive justice, culpability, causality and responsibility will be examined in connection with the study of important political and social positions.
Prerequisite: None
Corequisite: None

PHRM 1001 Fundamental Concepts of Pharmacy 3 3/0/0
This course introduces the student to the organization and function of the institutional, community and hospital pharmacy. Emphasis is on the duties and responsibilities of the pharmacy technician and the calculations required to accurately prepare patient medications for distribution.
Prerequisite: Assessment into ENGL 1101 or college writing equivalent and MATH0055
Corequisite: None

PHRM 2001 Pharmacy Principles and Practices I 4 2/2/0
This course covers drug names, classifications and mechanisms of action, the use of computers in pharmacy and their practical applications. The student will be introduced to hospital and retail dispensing techniques as well as basic customer service.
Prerequisite: PHRM1001
Corequisite: PHRM1001

PHRM 2002 Pharmacy Principles and Practices II 5 2/3/0
This course covers intravenous drug admixture, TPN compounding, critical care intravenous admixture and unit dose medication dispensing to nursing units. Emphasis is placed upon medication storage and stability, diabetic supplies, and chemotherapy storage and admixture.
Prerequisite: PHRM1001 AND PHRM2001
Corequisite: None

PHRM 2004 Drug Properties/Distribution 3 2/1/0
This course provides the student with basic physical and chemical drug properties and the functions related to purchasing and inventory control in the pharmacy. Emphasis is placed upon the theory, stability and safety of drug products, and the procedures required to develop and maintain inventory control.
Prerequisite: PHRM1001 AND PHRM2001
Corequisite: None

PHRM 2010 Experiential / Hospital 3 0/0/3
This supervised instructional experience in the clinical setting introduces the student to tasks performed by the pharmacy technologist.
Prerequisite: PHRM1002 AND PHRM2004
Corequisite: None

PHRM 2012 Experiential / Retail 3 0/0/3
This supervised instructional experience in the clinical setting introduces the student to tasks performed by the pharmacy technologist.
Prerequisite: PHRM2002 AND PHRM2004
Corequisite: None

PHYS 1105 Fundamental Concepts in Physics 3 3/0/0
Meets MnTC Goal Area 3. This is a demonstration-based course that provides an introduction to selected topics in classical and modern physics. Topics will include measurement and significant digits, graphing, dimensional analysis, mechanics of motion, vibrations, waves, sound, electricity and magnetism, light and optics, atomic physics and atomic spectra, lasers and optical fibers, nuclear physics and radiation. The course uses active learning techniques with lab-like experiences. It uses many demonstrations and instructor-guided small group problem-solving activities. Simple algebra is used to ensure that students grasp the course concepts. This course is intended for all students but is especially designed for non-science majors who want an appreciation of a limited working knowledge in some major areas of physics.
Prerequisite: None
Corequisite: None

PHYS 1106 Fund of Physics - Mechanics 3 3/0/0
Meets MnTC Goal Areas 3 and 6. This course is an introduction to selected topics in classical physics. The topics covered include measurement and significant digits, dimensional analysis, vectors, motion, force, work and energy, momentum and rotational dynamics. An introductory-level college algebra is used frequently to ensure that students grasp the principles and retain a working knowledge of them. This course may be taken separately from PHYS 1105 and is intended for all students but especially designed for non-science majors or those who need an introductory-level working knowledge of physics.
Prerequisite: None
Corequisite: None

PHYS 1107 Physics of Music 3 3/0/0
Meets MnTC Goal Areas 3. This course is an introduction to physics as it applies to the art and science of music. The course will be a mixture of lecture and lab-like experiences with both elements meeting concurrently. Experiments will be designed with musicians and non-scientists in mind and special care will be taken in the setting of lab reports. Topics include analysis of frequency, overtones, intensity, resonance and beats. Students will design and perform on musical instruments based on these principles.
Prerequisite: None
Corequisite: None

PHYS 1108 Physics of Flight 3 3/0/0
Meets MnTC Goal Areas 3. This course is an introduction to physics as it applies to various forms of flight. The course will be a mixture of lecture, discussion and hands-on experiences. Lab-like experiences will be designed for all students regardless of background. Topics will include a history of human flight, Newton's laws and kinematics, resistive forces, introductory fluid dynamics, electronic systems, basic flight systems, rockets and projectile motion. Students will create and present a model aircraft based on these principles.
Prerequisite: None
Corequisite: None

PHYS 1120 Introduction to Astronomy 3 3/0/0
Meets MnTC Goal Area 3. This course includes a description of the universe covering our current understanding of the solar system, lunar and stellar study, interstellar gases and galaxies. It focuses on the development of modern astronomy and its techniques, astronomical coordinates, the use of astronomical instruments and recent discoveries in astronomy and cosmology. This non-lab course with lab-like experiences is designed for science and non-science majors.
Prerequisite: None
Corequisite: None

PHYS 1401 College Physics I 4 3/1/0
Meets MnTC Goal Area 3. This course gives a theoretical and practical introduction to physics, including kinematics in one and two dimensions, force and dynamics, bodies in equilibrium, work and energy, linear momentum, rotational motion, fluids, waves and sound. Lab equipment is used to illustrate these concepts. A mastery of college algebra and some trigonometry is essential for success in this course. The ability to use computers for creating reports and spreadsheets is needed for lab work. Physics 1401 is intended for all students but is especially designed for students majoring in forestry, biological sciences, dentistry, pharmacy, veterinary medicine, physical therapy and other fields related to medicine. Lab required.
Prerequisite: MATH1115 OR MATH1116 OR MATH1118
Corequisite: None

PHYS 1402 College Physics II 4 3/1/0
Meets MnTC Goal Area 3. This course is open to all students and gives a theoretical and practical introduction to physics. It is a continuation of Physics 1401, College Physics I. However, it may be taken without having taken Physics 1401. Topics include thermodynamics, selected topics in electricity and magnetism, DC and AC circuit theory, light and electromagnetic radiation, atomic physics, spectroscopy, lasers and photochemistry, and nuclear physics. Lab equipment is used to illustrate these concepts. An introductory level of college algebra and some trigonometry is essential for success in this course. Lab is required. Physics 1402 is intended for all students but especially designed for students majoring in forestry, biological sciences, dentistry, pharmacy, veterinary medicine, physical therapy and other fields related to medicine.
Prerequisite: MATH1115 OR MATH1116 OR MATH1118
Corequisite: None

877.450.3322

Minnesota State Community and Technical College
Course Catalog 2017-2018
### COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
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<tbody>
<tr>
<td>PHYS 1411 University Physics I</td>
<td>5</td>
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<tr>
<td>PHYS 1412 University Physics II</td>
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<tr>
<td>PHYS 2970 Internship Experience</td>
<td>1–3</td>
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<tr>
<td>PLBG 1101 Piping and Job Safety</td>
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<tr>
<td>PLBG 1103 Plumbing Trade Tools</td>
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<td>2/0/0</td>
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<tr>
<td>PLBG 1115 Faucets and Fixtures</td>
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<tr>
<td>PLBG 1119 Materials and Fittings</td>
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<tr>
<td>PLBG 1123 Plumbing Code I</td>
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<tr>
<td>PLBG 1125 Plumbing Lab I</td>
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<td>PLBG 1131 Grade and Elevation</td>
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<td>PLBG 1133 Blueprint Reading</td>
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<tr>
<td>PLBG 1135 Drainage, Waste and Venting</td>
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<td>PLBG 1137 Water Distribution</td>
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<tr>
<td>PLBG 1141 Plumbing Code II</td>
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<tr>
<td>PNSG 1200 Concepts of Nursing</td>
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<tr>
<td>PNSG 1207 Health Promotion I</td>
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<td>PNSG 1209 Maternal Child Health</td>
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<td>3/0/0</td>
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<tr>
<td>PNSG 1216 Practical Nursing Clinical I</td>
<td>5</td>
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<tr>
<td>PNSG 1217 Health Promotion II</td>
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</tbody>
</table>

The courses covered in this catalog include topics such as basic applied math, fundamentals of rigging and hand signals to equipment operators, plumbing codes, blueprint reading, and practical nursing clinical I. Each course is designed to provide the student with a meaningful work experience related to his or her field of interest. Experience will increase employability and enhance life skills. Completion of this course requires a written report and a presentation from the student's supervisor. Each internship is an individualized experience, therefore this course is offered with variable credits. The student may choose from 1, 2, or 3 credits as pre-arranged with the internship site supervisor and corresponding faculty. Each credit will require a minimum of 45 hours of on-the-job learning. This course will be graded Pass/Fail only.

### PROGRAM ACCREDITATION

The Minnesota State Community and Technical College is accredited by the Higher Learning Commission and is a member of the North Central Association of Colleges and Schools. This institution of higher education is approved by the Minnesota Office of Higher Education to provide certain programs leading to degrees and certificates. This institution also holds memberships in the Minnesota Educational Computing Consortium (MECC), the Minnesota Association of Two-Year Colleges (MATYC), and the Minnesota State Association of Two-Year Colleges (MSA).
**Course #** | **CourseTitle** | **CR** | **Lec/Lab/OJT**
---|---|---|---
PNSG 1221 Psychosocial Nursing | 2 | 2/0/0

This course focuses on nursing care that assists with promotion and support of the mental and emotional wellness of diverse clients within the scope of the practical nurse. Curriculum threads of coping mechanisms, stress and crisis management, therapeutic communication, mental health and illness, grief and loss, end-of-life concepts, and cognitive challenges are integrated throughout the course.

**Prerequisite:** PNSG2222

**Corequisite:** None

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PNSG 1223 Health Promotion III | 4 | 4/0/0

This course expands on the foundations of health promotion, maintenance and restoration of diverse populations. The curriculum threads include pathophysiology, data collection, pharmacology and nursing care related to the cardiovascular, immune-hematological, neurological, sensory and endocrine systems.

**Prerequisite:** PNSG1207 AND PNSG1216

**Corequisite:** None

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PNSG 1226 Practical Nursing Clinical II | 4 | 0/4/0

This course builds on patient-centered care values while integrating critical thinking, safety, quality and evidence-based practice to prioritize care of two patients. Curriculum threads including data collection, dosage calculations, pharmacological concepts, reinforcing patient teaching and documentation are integrated throughout the course.

**Prerequisite:** PNSG1209 AND PNSG1216 AND PNSG1217

**Corequisite:** None

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PNSG 1232 Principles of Intravenous Therapy | 1 | 0/1/0

This course builds on basic intravenous theory and skills. Curriculum threads include fluid and electrolytes, acid/base balance, intravenous fluids and equipment, venous access, parenteral medication. Engagement of critical thinking, initiating and maintaining primary and secondary fluids, intravenous push medications, central line dressing changes, central line cap changes, dosage calculations and successful venipunctures. The role of the practical nurse in intravenous therapy is integrated throughout the course.

**Prerequisite:** PNSG1216

**Corequisite:** Current Practical Nursing Licensure

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PNSG 1234 Nursing Roles | 1 | 1/0/0

This course is an overview of practical nursing within health care. Curriculum threads including nursing roles, health care delivery systems, health care trends, legal aspects, ethical issues and role transition are integrated throughout the course.

**Prerequisite:** PNSG1216

**Corequisite:** None

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PNSG 1236 Practical Nursing Pracicum | 2 | 0/2/0

This cornerstone course integrates the knowledge and concepts learned throughout the practical nursing curriculum. The student builds professional relationships by participating within the multidisciplinary health care team with minimal supervision. The student utilizes resources and critical thinking to solve problems and deliver nursing care to multipatients with excellent documentation.

**Prerequisite:** PNSG1217 AND PNSG1214 AND PNSG1220 AND PNSG1223 AND PNSG1226 AND PNSG1232 AND PNSG1234

**Corequisite:** None

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PNSG 1500 Nursing Care of Adults I | 3 | 2/1/0

This course introduces students to the care of the adult patient with a focus on health promotion and safety. Emphasis is on common health problems of the adult as well as chronic illness and end-of-life care. Application of pathophysiology, nutrition and pharmacology are applied to common diseases within each topic area. Additional emphasis includes understanding of fluids in blood and electrolytes, oxygenation, cardiac output and tissue perfusion, regulation and metabolism, cognition and sensation, immunity, integument, mobility, reproduction, ingestion/digestion/absorption/elimation, excretion, physical and psychosocial variations, chronic illness, end-of-life care, environmental safety and emergency preparedness.

**Prerequisite:** Acceptance into the Practical Nursing Program

**Corequisite:** None

---

PNSG 1508 Foundations of Adult Nursing Care I | 8 | 5/3/0

This course introduces concepts of teamwork and collaboration, safety, quality improvement, professional identity and behavior, patient-centered and relationship-centered care, nursing judgment, evidence-based practice, managing care of the individual patient, informatics and technology. An introduction to the theoretical foundation for basic nursing skills and focused assessments. Skills and assessments are demonstrated in the laboratory setting. An introduction to the nursing process provides the student with a beginning framework for decision making.

**Prerequisite:** Acceptance into the Practical Nursing Program

**Corequisite:** None

---

PNSG 1520 Nursing Care of Women, Newborns, and Children | 2 | 2/0/0

This course provides an integrative approach to care of childbearing women, newborns and children. Emphasis is placed on normal pregnancies, normal growth and development, and common pediatric disorders. Principles of pathophysiology, nutrition and pharmacology are applied.

**Prerequisite:** BIOC1200 AND BIOC2200 AND PSYC2222 AND PNSG1508 AND PNSG1514

**Corequisite:** None

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PNSG 1522 Transition to Practical Nursing Practice | 1 | 1/0/0

This course prepares the student for transition into practical nursing practice. Concepts related to career development options that enhance career mobility are explored. Skills of practice and the importance of practicing according to state regulations and statutes that are within the scope of practice for the practical nurse are reviewed. The role of the practical nurse in emergency preparedness is examined.

**Prerequisite:** BIOC1200 AND BIOC2200 AND PSYC2222 AND PNSG1508 AND PNSG1514

**Corequisite:** None

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PNSG 1524 Practical Nursing Mental Health | 2 | 2/0/0

This course focuses on the care of individual patients with psychiatric and behavioral disorders. Emphasis is placed on common psychiatric and behavioral disorders as well as promoting and maintaining the mental health of individual patients. Principles of pathophysiology, nutrition and pharmacology are applied.

**Prerequisite:** PSYC2222 AND BIOC1200 AND BIOC2200 AND PNSG1508 AND PNSG1514

**Corequisite:** None

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PNSG 1528 Clinical II Practical Nursing | 5 | 1/4/0

This course provides the student an opportunity to apply nursing judgment using evidence-based care, critical thinking and clinical judgment to implement safe, patient-centered and relationship-centered care to individual patients across the lifespan. The clinical student reflects on the value of patient-centered care, teamwork and collaboration, informatics, quality improvement, safety, managing care of the individual patient, nursing judgment and evidence-based care. Concepts related to career development options that enhance career mobility are reviewed. Standards of practical nursing and the importance of practicing according to state-regulated scope of practice are reviewed.

**Prerequisite:** BIOC1200 AND PSYC2222 AND PNSG1500 AND PNSG1510 AND PNSG1512 AND PNSG1514

**Corequisite:** None

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PNSG 1528 Clinical II Practical Nursing | 4 | 0/4/0

This course provides the student an opportunity to apply nursing judgment using evidence-based care, critical thinking and clinical judgment to implement safe, patient-centered and relationship-centered care to individual patients across the lifespan. The student's reflection on the value of patient-centered care, teamwork and collaboration, informatics, quality improvement, safety, managing care of the individual patient, nursing judgment and evidence-based care. Concepts related to career development options that enhance career mobility are reviewed. Standards of practical nursing and the importance of practicing according to state-regulated scope of practice are reviewed.

**Prerequisite:** Acceptance into the Practical Nursing Program AND experience as a Certified Nursing Assistant AND current American Heart Association Basic Life Support AND current, clear Minnesota Department of Health criminal background check AND current, clear national background check AND up-to-date immunizations and health form.

**Corequisite:** None
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<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PNSG 1530</td>
<td>Nursing Care of Adults II</td>
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<tr>
<td></td>
<td>This course focuses on the care of adults with common medical and surgical problems. Emphasis is on physiological disorders that require management in an acute care facility. Application of pathophysiology, nutrition and pharmacology is applied to co-morbid diseases within each topic area. Additional emphasis includes advanced alterations in fluid and electrolytes, oxygenation, cardiac output and tissue perfusion, regulation and metabolism, cognition and sensation, immunity, integration, mobility, reproduction, ingestion, digestion, absorption, elimination, excretion, pre and post-operative care and oncology.</td>
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<td>BIOL2260 AND PSYC2222 AND PNSG1500 AND PNSG1510 AND</td>
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<td>PNSG1512 AND PNSG1514</td>
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<tr>
<td>POLS 1120</td>
<td>American National Government</td>
<td>3</td>
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<tr>
<td></td>
<td>Meets MnTC Goal Areas 5 and 9. This course provides an analysis of the organization, institutions and functions of the United States government.</td>
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<td>POLS 1130</td>
<td>State and Local Government</td>
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<td></td>
<td>Meets MnTC Goal Areas 5 and 9. This course provides an analysis of the organization, procedure and functions of state and local governments and their relationship with the national government.</td>
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<td>POLS 2204</td>
<td>Comparative Government</td>
<td>3</td>
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<td>Meets MnTC Goal Areas 5 and 8. This course provides an introduction to the various systems of government used around the world. Students will compare the processes and institutions of both industrialized and underdeveloped nations and explore how cultures and histories have affected the development of those political systems.</td>
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<td>Prerequisite:</td>
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<tr>
<td>POLS 2220</td>
<td>Introduction to Constitutional Theory</td>
<td>3</td>
<td>3/0/0</td>
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<td>Meets MnTC Goals 2, 5 and 9. This course focuses on some of the significant constitutional issues that confront policy makers and citizens of the United States. The framework for study is the United States Constitution. Topics covered include executive, legislative and judicial powers, separation of powers, civil liberties, civil rights and federalism.</td>
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<tr>
<td>POLS 2310</td>
<td>Ideas and Ideologies</td>
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<td>3/0/0</td>
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<td>Meets MnTC Goal Areas 7 and 9. This course provides a survey of the most significant ideological systems in Western politics, with an emphasis on the most influential ideas of the 20th and 21st centuries. Modern political movements such as communism, fascism, liberalism, conservatism, feminism, environmentalism and others will be explored and evaluated, with emphasis on the philosophical roots of these systems.</td>
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<tr>
<td>POLS 2950</td>
<td>Introduction to Social Research</td>
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<td>Meets MnTC Goals 2 and 5. This course introduces methods and concepts used in the research process in the social sciences and related fields. Topics covered include the application of the scientific method to social and behavioral research, definitions and measurements of variables, research design, experimental methods and survey techniques. The use of literature reviews and the importance of critically evaluating research will be emphasized. Common descriptive and inferential statistics used in social science disciplines also will be introduced. This course is identical to SOC 2950 and PSYC 2950 and is cross-listed with both of those courses. Students may choose to enroll in the course with the prefix most appropriate to their transfer and career goals.</td>
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<td>MATH1200 AND ENGL1101 AND Completion of six (6) credits in SOC, PSYC, or POLS</td>
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<tr>
<td>PSYC 1101</td>
<td>Human Interaction</td>
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<td>Meets MnTC Goal Areas 2 and 5. This is an introductory course emphasizing practical applications of psycho-social concepts, with specific emphasis on personality development, human relations and motivation. This course is applicable for students in occupational and health-related fields or general education.</td>
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<td>PSYC 1200</td>
<td>General Psychology</td>
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<td>Meets MnTC Goal Areas 5 and 9. This is a comprehensive introductory overview of psychology that studies human behavior and mental processes. Topics include (but are not limited to) research methods, the history of psychology, neuroscience and behavior, developmental psychology, sensation and perception, motivation and emotion, health</td>
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<td>psychology, learning and memory, personality, social psychology, psychopathology and psychiatric disorders, and states of consciousness such as sleep and dreams.</td>
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<tr>
<td>PSYC 1201</td>
<td>Introduction to Mental Health Behavioral Aide</td>
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<td>This course will provide students with resources to enter practice as a Mental Health Behavioral Aide II with a focus on children with mental illnesses. Students will achieve clinical competencies in providing skill-building peer-to-peer or parent child interactions, performing as a role-play partner, reinforcing children’s accomplishments, generalizing skill-building activities in children’s multiple natural settings, and developing redirection and de-escalation skills. The aide will perform these duties under the supervision of a mental health practitioner. This course is the same as HLTH 1201 and will be cross-listed. This course is not an MnTC Goal Area 5 course and may not be used as a replacement for Goal Area 5 course. This course is designed for students enrolled in the Mental Health Behavioral Aide II certificate program.</td>
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<td>PSYC 1500</td>
<td>Positive Psychology</td>
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<td>Meets MnTC Goal Areas 5 and 9. This course includes different aspects of health psychology, humanistic psychology and positive psychology with emphasis on the integration of psychological, biological and physical factors and the consequences for health and well-being. The course starts with the body’s systems, psychological theories behind well-being, and positive emotions which are followed up by work methods and interventions to improve public health, well-being and a healthy work life. Gender and cultural perspectives will be considered throughout the course. Scientific methodology and the design for the study of positive psychology are also included in the course.</td>
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<td>PSYC 2220</td>
<td>Abnormal Psychology</td>
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<td>Meets MnTC Goal Area 5. This course is an introduction to the diagnosis, etiology and treatment of maladaptive behavior. The course will include historical and theoretical approaches, prevention and community resources.</td>
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<td>PSYC 2222</td>
<td>Lifespan Development</td>
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<td>Meets MnTC Goal Areas 5 and 9. This course is a study of human development from the lifespan perspective, including theories, stages and influences of development. The course views the individual from conception to death through physical, cognitive, social and emotional development.</td>
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<td>PSYC 2224</td>
<td>Social Psychology</td>
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<td>Meets MnTC Goal Areas 5 and 9. This course is designed to cover the issues and themes current in the field of social psychology. Examples of such issues include relational and physical aggression; the role of technology in group relations; stereotypes, prejudice and discrimination; and how group identification influences thinking and behavior. A range of psychological theories and concepts will be examined and compared historically, as well as across multiple social contexts.</td>
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<td>PSYC 2226</td>
<td>Behavior and Environmental Management</td>
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<td>Meets MnTC Goal Areas 5 and 9. This course is an exploration of the scientific study of human behavior and its interrelatedness with the environment. This course describes and explains the acquisition, maintenance and change of behavior with an emphasis on human application within a variety of environmental contexts. This course uses critical thinking on the principles and procedures used to understand and change the environment and human behavior.</td>
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<td>PSYC 2230</td>
<td>Personality Psychology</td>
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<td>Meets MnTC Goal Area 5. This course examines historical and current theoretical perspectives of personality including psychoanalytic, humanistic, behavioral/social-learning, cognitive, biological and trait theories. This course is designed to examine the methods involved in personality psychology research, the ways in which humans differ with regard to personality, the variables that influence personality and how personality might influence behavior, as well as the development and assessment of personality.</td>
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<td>PSYC 2302</td>
<td>Cross-Cultural Psychology</td>
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<td>Meets MnTC Goal Areas 5 and 9. This course is designed to cover the issues and themes current in the field of cross-cultural psychology. Examples of such issues include cultural variation along the lines of collectivism and individualism; psychological principles that might be universal compared to those that are culturally specific; and how content and context affect psychological functioning within or across between cultures. A range of substantive areas within psychology will be examined and compared across multiple cultures, including cognitive, social, health and developmental psychology.</td>
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COURSE DESCRIPTIONS

PSYC 2900 Statistics for Behavioral and Social Sciences 4 3/1/0
Meets MnTC Goal Area 5. Students will use basic mathematical and computerized procedures to analyze data in the behavioral sciences. The course will cover the use of statistical software to conduct descriptive and inferential data analyses. Students will choose and apply statistical procedures to help answer psychological and behavioral scientific research questions. Students also will learn to read, interpret and write reports based on American Psychological Association style guidelines.
Prerequisite: PSYC 1200 with a grade of C or higher AND MATH 1114 or higher
Corequisite: None

PSYC 2950 Introduction to Social Research 3 3/0/0
Meets MnTC Goals 2 and 5. This course introduces methods and concepts used in research processes in the social sciences and related fields. Topics covered include the application of the scientific method to social and behavioral research, definitions and measurements of variables, research design, experiential methods and survey techniques. The use of literature reviews and the importance of critically evaluating research will be emphasized. Common descriptive and inferential statistics used in social science disciplines will also be introduced. This course is identical to POLS 2950 and SOC 2950 and is cross-listed with both of those courses. Students may choose to enroll in the course with the prefix most appropriate to their transfer and career goals.
Prerequisite: MATH1020 AND ENGL1101 AND Completion of six (6) credits in SOC, PSYC, or POLS
Corequisite: None

PWST 1010 Introduction to PowerSports I 2 1/1/0
This course focuses on the study of two-cycle engine technology. The importance of occupational safety, the use of shop equipment, measuring instruments and service literature, along with appropriate service department etiquette will be addressed. Two-cycle engine theory along with proper lubricants will be covered. All these will be taught and expressed with the PowerSports and Marine industry shop experience as a basis for study.
Prerequisite: None
Corequisite: None

PWST 1012 Introduction to PowerSports II 2 1/1/0
This course focuses on the study of four-cycle engine technology. The importance of occupational safety, the use of shop equipment, measuring instruments and service literature will be addressed. Four-cycle engine theory along with proper lubricants will be covered. Students will compare the advantages and disadvantages of two-cycle and four-cycle engines. All these will be taught and expressed with the PowerSports and Marine industry shop experience as a basis for study.
Prerequisite: PWST1010
Corequisite: None

PWST 1302 Snowmobile I 5 2/3/0
This course covers snowmobile engine designs, component identification and engine service procedures. This course also covers snowmobile fuel systems and service.
Prerequisite: None
Corequisite: None

PWST 1304 Snowmobile Clutching 2 1/1/0
This course identifies major components of constant variable transmission systems and discusses maintenance, routine adjustment and tuning of variable transmission clutch systems.
Prerequisite: None
Corequisite: None

PWST 1310 Personal Watercraft and Jet Pumps 2 1/1/0
This course offers a comprehensive view of maintenance, overhauls, techniques, diagnostics and post-repair inspections for jet pump drive systems used in the watercraft industry.
Prerequisite: None
Corequisite: None

PWST 1402 Chainsaws 2 1/1/0
Students will learn various manufacturers' repair and testing techniques. Students will learn saw repair, chain sharpening and maintenance of chainsaws. Students will be evaluated according to industry standards. Stihl bronze certification is available upon successful completion of the Stihl training portion of the class.
Prerequisite: None
Corequisite: None

PWST 1404 Generators 2 1/1/0
This course covers generator components and test procedures. Students will test generator voltages and learn how to diagnose and repair generators. Students should have a basic understanding of electricity and electrical meter usage.
Prerequisite: None
Corequisite: None

PWST 1406 Chainsaws and Generators 2 1/1/0
This course offers a comprehensive view of overhaul techniques, diagnostics and post-repair inspections of modern chainsaws. This course also covers generator components and testing procedures. Students will test generator voltages and learn how to diagnose and repair generators. Students must have an understanding of electricity and electrical meter usage prior to taking this class.
Prerequisite: None
Corequisite: None

PWST 2302 Advanced Power Equipment 4 2/2/0
This course covers overhaul procedures on outdoor power equipment. Students will make adjustments for optimum performance, learn multi-angle valve grinding procedures and the effects of modifications on a four-cycle engine. The course will also cover electric and engine troubleshooting.
Prerequisite: None
Corequisite: None

PWST 2304 Motorcycles I 3 1/2/0
This course focuses on various types of four-cycle motorcycle and ATV engines. Students will learn engine service and maintenance procedures. Students will also learn about motorcycle fuel systems and related components.
Prerequisite: None
Corequisite: None

PWST 2306 Snowmobile Drives and Suspensions 3 1/2/0
This course covers suspension operation and components. Students will learn suspension set-up and adjustment techniques and various suspension designs used by manufacturers. Students will perform suspension service on various manufacturers' snowmobiles.
Prerequisite: None
Corequisite: None

PWST 2308 Advanced Snowmobiles 3 1/1/0
Students will demonstrate troubleshooting skills. Students will perform electrical tests used in diagnosing electrical failures on snowmobiles. Students will learn and demonstrate a systematic approach to troubleshooting snowmobiles.
Prerequisite: None
Corequisite: None

PWST 2311 Motorcycles II 3 1/2/0
This course covers electrical and suspension systems. Students will learn four cycle motorcycle electrical components are located and their specific testing procedures. Students also learn the different types of suspension systems and repair procedures. Students will learn how to set up a motorcycleuspension for optimum performance.
Prerequisite: None
Corequisite: None

PWST 2312 Advanced Motorcycle Systems 3 1/2/0
This course is designed to test troubleshooting skills and knowledge. Students will be presented with motorcycle problems and, using a systematic approach, students will identify and repair the unit. This course is designed to simulate the role of a technician in a dealership. Students will be expected to write a work order, estimate repairs, make the repair and finalize the work order.
Prerequisite: None
Corequisite: None

RADT 1102 Fundamental Concepts of Radiologic Technology 2 1/1/0
This course will introduce the student to foundations of the radiologic technology profession. The content will include: an examination of the organization of health care facilities and radiology departments, the radiologic technologist's role in the health care setting, professional obligations and behaviors, employment opportunities, historical significance of the profession, accreditation of educational programs, educational requirements, certification, registration, and licensure processes, and human diversity in the health care setting.
Prerequisite: None
Corequisite: None

RADT 1112 Introduction to Radiologic Technology and Patient Care 4 3/1/0
This course is designed to provide concepts of radiologic sciences and patient care. Included in the course are discussions of professionalism, effective communication, patient physical needs assessment, patient consent procedures, x-ray production characteristics, basic radiation protection procedures, health care confidentiality, medical terminology, principles of pharmacology and contrast media, quality management, ethical behaviors and legal issues in health care. The student will also demonstrate competence in routine and emergency patient care, patient transfer and safety procedures, infection control, aseptic and sterile environment procedures, and radiographic equipment manipulation.
Prerequisite: None
Corequisite: RADT1114 AND RADT1124

RADT 1116 Radiographic Procedures I 5 3/1/0
This course will provide the student with the knowledge necessary to perform routine and mobile radiographic procedures relative to the thoracic and abdominal organs (including gastrointestinal studies), bony thorax, upper extremity and shoulder girdle. Emphasis will be on radiographic terms, anatomy, pathology, positioning, manipulation of radiographic equipment and accessories, and related patient care considerations.
Prerequisite: RADT1102
Corequisite: RADT1112 AND RADT1124

RADT 1124 Radiographic Procedures II 4 2/2/0
This course will provide the student with the knowledge necessary to perform routine and mobile radiographic procedures relative to the urinary system, lower extremity, pelvis, vertebral column and arthology. Emphasis will be on radiographic terms, anatomy, pathology, positioning, manipulation of radiographic equipment and accessories, and patient care considerations.
Prerequisite: RADT1102
Corequisite: RADT1112 AND RADT1116
COURSE DESCRIPTIONS

RADT 1132 Principles of Radiobiology 4 3/1/0
This course is designed to establish a basic knowledge of atomic structure and terminology and provide an overview of the principles of radiation protection and interaction with living systems. Also presented are the nature and characteristics of radiation (i.e., its effects on molecules, cells, tissues and the body as a whole, x-ray production and the fundamentals of photon interactions with matter). Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies, health care organizations and the responsibilities of the radiographer for patients, personnel and the public are also incorporated. Factors affecting biological response are presented, including acute and chronic effects of radiation.
Prerequisite: RADT1112 AND RADT1116 AND RADT1124
Corequisite: RADT1140 AND RADT1146

RADT 1140 Radiographic Imaging 4 2/2/0
This course is designed to establish a knowledge base of factors that govern and influence the production and recording of radiographic images as well as provide a basis for analyzing those images. Film and electronic imaging with related accessories will be emphasized. Included is the importance of minimum imaging standards, discussion of problem-solving techniques, the factors that can affect image quality. Class demonstrations/labs are used to demonstrate application. Actual images will be included for analysis.
Prerequisite: RADT1112 AND RADT1116 AND RADT1124
Corequisite: RADT1132 AND RADT1146

RADT 1146 Radiographic Procedures III 4 2/2/0
This course will provide the student with the knowledge necessary to perform routine and mobile radiographic procedures relative to skull (including sensory organs), traumatic injury, and surgical radiography. Pathological conditions of these anatomical structures will also be discussed. In addition, the student will be instructed in the special studies of the central nervous system, cardiovascular, lymphatic system and cross-sectional imaging. Special imaging equipment, physical settings and techniques used in these specialized studies will also be included.
Prerequisite: RADT1112 AND RADT1116 AND RADT1124
Corequisite: RADT1140 AND RADT1132

RADT 1180 Radiographic Clinical I 5 0/0/5
The emphasis of this clinical rotation will be on radiographic positioning and manipulation of radiographic equipment and accessories related to radiography of the thoracic and abdominal viscera, upper and lower extremities, shoulder girdle and pelvis.
Prerequisite: RADT1140 AND RADT1146 AND RADT1132
Corequisite: RADT1190

RADT 1190 Radiographic Clinical II 5 0/0/5
This clinical course emphasizes the basic radiographic procedures and positioning related to the upper and lower gastrointestinal tract and the biliary system. The student also will continue to develop their radiographic positioning and manipulation skills and positioning related to the thoracic and abdominal cavities and the upper and lower extremities including the shoulder girdle and the pelvis.
Prerequisite: RADT1140 AND RADT1146 AND RADT1132
Corequisite: RADT1180

RADT 2100 Radiographic Clinical III 5 0/0/5
This clinical course emphasizes the basic radiographic procedures and positioning related to the urinary system, the bony thorax and the vertebral column. The student is also introduced to radiographic exposure factors and off-peak (e.g. evening and weekend) clinical hours.
Prerequisite: RADT1180 AND RADT1190
Corequisite: RADT2222 AND RADT2210

RADT 2110 Radiographic Clinical IV 5 0/0/5
This clinical course emphasizes the basic radiographic procedures and positioning related to the skull, facial bones, paranasal sinuses and detailed areas of the skull. This clinical experience provides an opportunity to work with increased independence.
Prerequisite: RADT1180 AND RADT1190
Corequisite: RADT2222 AND RADT2210

RADT 2120 Radiographic Clinical V 5 0/0/5
This clinical course provides the student with the opportunity to function more independently in all areas of basic radiography and to develop clinical skills in regular radiographic areas and procedures, with continuing experience in trauma and surgical procedures. The student will be exposed to special procedures and will begin rotations through the specialized areas of nuclear medicine, radiation therapy, computerized tomography, ultrasonography and magnetic resonance imaging.
Prerequisite: RADT221000 AND RADT2110 AND RADT2224
Corequisite: RADT2280 AND RADT22100

RADT 2130 Radiographic Clinical VI 5 0/0/5
This clinical course emphasizes the development of independence, discretion and judgment while performing basic radiographic procedures. It provides the student with the opportunity to function as a nearly registry-eligible radiographer. The student is expected to correlate all clinical and didactic experiences while demonstrating a high degree of proficiency and efficiency.
Prerequisite: RADT221000 AND RADT2110 AND RADT2224
Corequisite: RADT221000 AND RADT2280

RADT 2224 Imaging Equipment 4 2/2/0
This course is designed to establish a knowledge base in radiographic, fluoroscopic, mobile and tomographic equipment (including computed tomography) requirements and design including circuitry of the x-ray machine. The content will also provide a basic knowledge of quality control. Computer applications in the radiologic sciences related to image capture, display, storage and distribution are presented as well.
Prerequisite: ADT1180 AND ADT1190
Corequisite: RADT2100 AND RADT2110

RADT 2268 Mammography Clinical 4 0/0/4
The emphasis of this clinical rotation will be on positioning and manipulation of mammographic equipment and accessories during imaging procedures of the breasts. This course will also address quality improvement procedures specific to mammography equipment and procedures.
Prerequisite: RADT2258 AND ARRT Certification in Radiography
Corequisite: None

RADT 2280 Radiologic Technology Registry Review 2 2/0/0
This course is designed to prepare the student to write the national board exam administered by the American Registry of Radiologic Technologists (ARRT). A review of all course work presented in the program with an emphasis on the ARRT exam specifications will be presented.
Prerequisite: RADT2100 AND RADT2110 AND RADT2224
Corequisite: RADT2120 AND RADT2130

REFR 1110 Refrigeration, Air Conditioning and Heating Principles 3 3/0/0
This course covers refrigeration theory of domestic refrigeration and introduction theory to commercial refrigeration and residential heating and air conditioning equipment including controls and accessories.
Prerequisite: None
Corequisite: None

REFR 1112 Refrigeration, Air Conditioning and Heating Lab 3 0/3/0
This course covers the operation and service procedures of domestic refrigeration and an introduction to residential heating and air conditioning and commercial refrigeration equipment. Safety is emphasized.
Prerequisite: None
Corequisite: None

REFR 2202 Commercial Refrigeration and Air Conditioning Principles 4 3/0/1
This course covers the principles of basic heat theory and gas laws as they apply to refrigeration systems. The operation of commercial walk-in coolers and freezers, commercial ice machines, air conditioners and heat pumps will be discussed, along with accessory components and piping methods used to install and maintain these systems. Safety is emphasized.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

REFR 2204 Commercial Refrigeration and Air Conditioning Lab 3 0/3/0
This course covers practical applications related to commercial refrigeration and air conditioning equipment. The commercial refrigeration and air conditioning lab learning experience includes sequence of operation, troubleshooting, repair, maintenance and installation. Safety is emphasized throughout the course.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

REFR 2206 Commercial Electrical Principles 3 3/0/0
This course covers the fundamentals of electrical components used in commercial refrigeration and air conditioning equipment. Reading and understanding electrical schematics will be employed to comprehend the sequence of operations in troubleshooting. Students also will develop their own wiring diagrams by applying Ohm’s law and how it relates to series and parallel circuits. Safety is emphasized.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

REFR 2208 Commercial Electrical Lab 3 0/3/0
This course covers the practical applications of electrical components used to operate commercial refrigeration and air conditioning equipment. Included are troubleshooting, repairing and installing electrical devices common in larger systems. Students will use schematics they have developed to build control systems to operate refrigeration and air conditioning systems. Safety is emphasized.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

REFR 2211 Advanced Refrigeration Principles 4 4/0/0
This course prepares students for more advanced labs sessions on commercial refrigeration and air conditioning systems. Students need to have a very good understanding of commercial refrigeration and electrical systems. Safety is emphasized.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

REFR 2212 Advanced Refrigeration Lab 3 0/3/0
This course gives students the opportunity to work on more complicated refrigeration systems through individual or paired groups on field trips, off-site meetings and hands-on projects. Safety is emphasized.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

REFR 2213 Advanced Electrical Theory 3 3/0/0
This course covers the electrical principles and schematics used in commercial refrigeration and air conditioning equipment. The commercial refrigeration and air conditioning lab learning experience includes sequence of operation, troubleshooting, repair, maintenance and installation. Safety is emphasized throughout the course.
Prerequisite: None
Corequisite: None
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
<th>Lec/Lab/OJT</th>
<th>Course #</th>
<th>Course Title</th>
<th>CR</th>
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<tr>
<td>REFR 2215 Advanced Electrical Applications</td>
<td>3</td>
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<td>None</td>
<td>SOC 2117 Rural Sociology</td>
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<td>REF 2216 Refrigeration Internship</td>
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<td>0/0/3</td>
<td>None</td>
<td>SOC 2220 Food, Culture and Society</td>
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<td>SOC 1111 Introduction to Sociology</td>
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<td>None</td>
<td>SOC 2222 Sociology of Agriculture</td>
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<td>SOC 1113 Social Problems</td>
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<td>0/0/3</td>
<td>None</td>
<td>SOC 2950 Introduction to Social Research</td>
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<td>SOC 1114 Sociology Service Learning</td>
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<td>None</td>
<td>SOMM 1400 Social Media Visual Methods</td>
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<td>SOC 2210 Social Deviance</td>
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<td>SOMM 2220 Social Media Management</td>
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<td>SOC 2212 Sociology of the Family</td>
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<td>0/0/3</td>
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<td>SOMM 2300 Social Media Campaigns</td>
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<td>SOC 2215 Criminology</td>
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<td>0/0/3</td>
<td>None</td>
<td>SPAN 1111 Beginning Spanish I</td>
<td>4</td>
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<tr>
<td>SOC 2216 Minority Group Relations</td>
<td>3</td>
<td>0/0/3</td>
<td>None</td>
<td>SPAN 1112 Beginning Spanish II</td>
<td>4</td>
<td>0/0/0</td>
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</tr>
</tbody>
</table>

- This course explores the application of electrical principles used in commercial, industrial, hospital and supermarket refrigeration systems. Safety is emphasized.
- Meets MnTC Goal Areas 5 and 7. This course is a sociological study of the forces which have transformed the rural setting and impacted future trends in rural America. The course will also focus on the diverse cultural heritage contributing to the rich cultural landscape found in rural scenarios.
- Meets MnTC Goal Areas 5 and 7. This course examines the social and cultural dimensions of the production, preparation and consumption of food. The course will include discussion of a wide variety of topics including food citizenry, sustainable food production, agroecology, hunger, food sovereignty, food choice and options, policy and legislation, social justice, and the interplay between food and gender, social class, race and environment.
- This course is identical to POLS 2950 and PSYC 2590 and is cross-listed with both of those courses. Students may choose to enroll in the course with the prefix most appropriate to their transfer and career goals.
- Meets MnTC Goal Areas 5 and 7. This course examines the social and cultural dimensions of the production, preparation and consumption of food. The course will include discussion of a wide variety of topics including food citizenry, sustainable food production, agroecology, hunger, food sovereignty, food choice and options, policy and legislation, social justice, and the interplay between food and gender, social class, race and environment.
- This course is identical to POLS 2950 and PSYC 2590 and is cross-listed with both of those courses. Students may choose to enroll in the course with the prefix most appropriate to their transfer and career goals.
- This course is designed to cover the refrigeration piping and oil return in a grocery store setting. Students will learn about case controllers and temperature controls.
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- This course covers the application of electrical principles used in commercial, industrial, hospital and supermarket refrigeration systems. Safety is emphasized.
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- Prerequisite: Completion of HVAC/R diploma.
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- Prerequisite: Completion of HVAC/R diploma.

- Corequisite: None
- Corequisite: None
- Corequisite: None
- Corequisite: None
SPAN 2211 Intermediate Spanish I 4 4/0/0 Meets MnTC Goal Areas 8. This course is the first semester of Intermediate Spanish. Students will develop reading, writing, listening and speaking through a focus on historical, political, cultural and artistic expressions of the Spanish-speaking world. Grammar from beginning Spanish courses is lightly reviewed. Students will learn new grammatical skills including the perfect tense of the indicative mood and simple tenses of the subjunctive mood. Prerequisite: SPAN1112 OR Instructor approval Corequisite: None

SPAN 2212 Intermediate Spanish II 4 4/0/0 Meets MnTC Goal Area 8. This course is the second semester of Intermediate Spanish. Students continue to hone their reading, writing, listening and speaking through a focus on historical, political, cultural and artistic expressions of the Spanish-speaking world. Grammar from Intermediate Spanish is further developed to include the simple and perfect tenses of the indicative and subjunctive moods. Students investigate the development of science and technology on various aspects of the Spanish-speaking world. Prerequisite: Instructor approval Corequisite: None

SPED 2250 Individuals with Exceptionalities 3 3/0/0 This course traces the path of disability laws and provides an introduction to the recognition, incidence, educational and lifelong needs of individuals with exceptionalities. Personal and societal views regarding cultural and linguistic diversity will be explored. A wide range of educational services are studied with emphasis on the shared responsibility of professionals in education, community and professional settings, and students are introduced to the wide-range of professionals involved with exceptional individuals. Prerequisite: None Corequisite: None

SUPL 1110 Budget and Financial Management 3 3/0/0 This course is designed for non-financial personnel who need to understand the basic theories of finance and apply them to practical business decisions. Key topics include learning the generally accepted accounting and budgeting principles, financial statement analysis, analysis of return on investment and cost/benefit ratios analysis of annual reports. Prerequisite: None Corequisite: None

SUPL 1118 Lead and Facilitate Teams 3 3/0/0 This course will address the role of supervisor, manager and leader as a leader and facilitator of work teams. Topics will include planning work teams, creating effective team interaction, identifying characteristics of successful teams and demonstrating skills and behaviors of both team leader and team member. Prerequisite: None Corequisite: None

SURT 1200 Introduction to Surgical Technology 3 3/0/0 This course explores the role of surgical technologists. Fundamental principles of asepsis, professionalism, communication, universal precautions, the surgical team, operating room environment and patient care concepts are introduced. Prerequisite: Acceptance into the Surgical Technology program. Corequisite: None

SURT 1210 Surgical Technology I 6 3/3/0 This course introduces the student to the role of the surgical technologist in the operating room and introduces the foundation for patient care in the operating room. Prerequisite: Acceptance into Surgical Technology program Corequisite: SURT1200

SURT 1215 Surgical Pharmacology 3 2/1/0 This course introduces basic surgical pharmacology. Topics include drug classification, therapeutic effects, side effects, interactions and dosage calculations. Corequisite: SURT1220

SURT 1220 Surgical Technology II 5 2/3/0 This course expands the student's knowledge of the role of the surgical technologist in the operating room. The course considers procedures of the musculoskeletal, digestive, respiratory, reproductive, otic and ophthalmic systems, building on the foundation of patient care relating to these body systems in the different perioperative phases. Prerequisite: SURT1210 Corequisite: SURT1215

SURT 1230 Surgical Technology III 4 4/0/0 This course continues to expand the student's knowledge of the role of the surgical technologist in the operating room. The course considers procedures of the lymphatic, circulatory, vascular and nervous systems, building on the foundation of patient care relating to these body systems in the different perioperative phases. Prerequisite: SURT1215 AND SURT1220 Corequisite: SURT1240

SURT 1250 Surgical Clinical I 6 0/0/6 This course introduces the student to patient care in an operating room in the role of surgical technologist. Prerequisite: SURT1215 AND SURT1220 Corequisite: SURT1230

SURT 1255 Surgical Clinical II 6 0/0/6 This course introduces the student to patient care in an operating room in the role of surgical technologist. Prerequisite: Successful completion of all SURT courses with a C or better. Corequisite: SURT1240

SW 2250 Introduction to Social Work/Social Welfare 3 3/0/0 This course introduces students to social welfare and social work, including fields of practice, institutions, populations served, the marketability of therapy, and social work methods and theories. A general historical and contemporary overview of the profession is provided, including its values, ethics, methods, multiple settings and a beginning use of system theory. Prerequisite: None Corequisite: None

THPY 1110 Massage Techniques and Ethics 3 2/1/0 This course provides students with an in-depth knowledge of massage techniques. Emphasis will be on the application of the basic massage strokes and their variations. Students will learn proper draping and positioning techniques and recommended client protocol. In regards to ethics, a variety of topics will be discussed and explored in order to help the students form their own written code of ethics. Prerequisite: None Corequisite: None

THPY 1118 Kinesiology 3 2/1/0 This course teaches students to identify the location and movements of skeletal muscles. Students will identify bones and bony landmarks. They will learn muscle origin and insertion using specific bony landmarks as points of anatomical reference. They will learn directional terms and terms of movement. Students will learn to identify and describe the movement of each muscle. Prerequisite: None Corequisite: None

THPY 1123 Integrative Massage 2 1/1/0 This course introduces students to a variety of specialized modalities of massage. Successful completion in the massage industry increases the marketability of therapists and is strongly recommended. Students will be familiar with the basic principles of each modality presented. In addition to lectures presented by the instructor, students will be responsible for researching modalities of particular interest to them. Prerequisite: None Corequisite: None

THPY 1130 Advanced Massage 2 1/1/0 This course prepares massage students to execute advance massage techniques. Students will learn optional techniques available to clients including abdominal massage, facial massage and massage of the gluteals. Massage for special populations will be discussed, including massage for the elderly and chair massage. Prerequisite: THPY1110 Corequisite: None

THPY 1135 Deep Tissue Massage 2 1/1/0 This course prepares the massage student to apply deep muscular therapy techniques. Students will be taught to identify, interpret and assess deep tissue massage techniques to deliver deep tissue massage safely. Trigger point therapy will be used extensively in this course. Students will learn the use of massage tools. Individual muscles will be isolated and massaged with parallel and cross fiber techniques. Prerequisite: THPY1110 Corequisite: None

THPY 1142 Practical Skills Clinic 3 0/3/0 This course provides students with an opportunity to develop the practical skills necessary to administer professional massage therapy treatments. In addition to performing massage treatments on the general public, students will also perform seated chair massage at scheduled on-site events as arranged by the instructor. This course provides students with an opportunity to develop the practical learned skills needed to work as a professional massage therapist. Prerequisite: THPY1110 AND Current certified CPR/First Aid card holder Corequisite: None

THPY 1146 Certification Preparation 2 2/0/0 This course is designed to prepare the students to take the National Certification Examination (NCE) issued by the National Certification Board of Therapeutic Massage & Bodywork (NCBTMB). Students will review anatomy, physiology, kinesiology, pathology, massage therapy, massage assessment and practice, adjunct techniques and business practices. Students will be taught to identify the areas where they need the most review and use outside texts to help them maximize their learning potential. A study guide and sample test questions will be used to exemplify the National Certification Examination. Students will be encouraged to apply to take the National Certification Examination after they receive their diploma. Prerequisite: THPY1110 Corequisite: None

THPY 1148 Sports Massage and Hydrotherapy 2 1/1/0 This course covers the fundamentals of hydrotherapy and sports massage. Students will be taught to perform massage treatments specific to individual sports. The course addresses pre-, post- and event-sports massage techniques, as well as rehabilitative massage for injuries and maintenance massage. Students will also be instructed on the use of hydrotherapy techniques. Hydrotherapy will address the application of water as treatment in each of its three forms, hot and cold treatments, hydrocollators,
body wraps and salt glows. These green techniques can be implemented into Swedish massage treatments and sports massage.  
Prerequisite: None  
Corequisite: None  

**THPY 1150 Business Development**  
This course will introduce the massage therapist to the business aspects of operating a massage practice. Topics include client scheduling, budgeting, bookkeeping, marketing and massage-related business issues. The course will detail client/therapist business concerns and help prepare students to identify and solve these concerns in a professional manner. Students will learn to write and execute a detailed workable massage business plan.  
Prerequisite: None  
Corequisite: None  

**THPY 1156 Massage Pathophysiology**  
This course discusses common pathologies that massage therapists are likely to encounter in their professional practices. It also discusses whether these conditions are indicated or contraindicated for massage and describes how they may be treated.  
Prerequisite: None  
Corequisite: None  

**THPY 2101 Lymphatic and Hospice Massage**  
This course covers the protocol and techniques for a full-body one-hour lymphatic drainage massage. Students will learn massage techniques for anatomy and physiology of the lymph system. Students also will gain hands-on exposure to massage on medically frail clients of all ages.  
Prerequisite: THPY1118 AND Diploma or Certificate in Massage Therapy  
Corequisite: None  

**THPY 2106 Neuromuscular Therapy**  
Students will reinforce previously learned techniques. Students will consider various treatment protocols utilizing scientifically proven, outcome-based techniques including neuromuscular therapy, myofascial release, trigger point therapy, muscle energy therapy, proprioceptive neuromuscular facilitated stretching, active-isolative stretching and positional release technique. Students will perform thorough patient assessments utilizing medical histories and objective findings through palpation, functional muscle testing, range of motion testing, postural examination and gait examination. Based on the assessment results, students will write a supplementary care-plan using carefully selected techniques and recommended exercises appropriate for the given condition. The suplementary care-plan will be written as prescribed by a licensed physician, chiropractor or physical therapist, focusing on conditions such as thoracic outlet syndrome, lateral epicondylitis, low back pain, piriformis syndrome and plantar fasciitis.  
Prerequisite: THPY1118 AND Diploma or Certificate in Massage Therapy  
Corequisite: None  

**THTR 1100 Introduction to Theatre**  
Meets MnTC Goal Area 6. Coursework in this content area will develop a student’s knowledge of the social and historic context of the theatre, including exploration of the history and evolution of theatre ritual performance and other cultural expression. Students will study and apply aesthetic principles and graphic skills involved in theatrical production. Each student will be required to learn and observe safety rules in theatrical production. Students will use analytical approaches to drama as text and performance. Students will explore the cultural and historical context of selected dramatic literature and the role of drama as a cultural, historical, political or personal artifact. Students will engage in critical writing in response to drama and explore the elements of production for selected plays.  
Prerequisite: None  
Corequisite: None  

**THTR 1105 Acting I**  
Meets MnTC Goal Area 6. Coursework will develop a student’s knowledge of the skills needed to work in the elements of performance such as cooperation, respect, responsibility and collaboration. Students will use voice and body in performance, imagination and application of a specific approach to the art of acting, and apply performance skills and techniques.  
Prerequisite: None  
Corequisite: None  

**THTR 1120 Theatre Performance Practicum**  
Meets MnTC Goal Area 6. This course is intended for students who participate as performers in a main stage or approved theatrical production. May be repeated twice.  
Prerequisite: None  
Corequisite: None  

**THTR 1125 Theatre Technical Practicum**  
Meets MnTC Goal Area 6. Practical work in this content area will develop a student’s knowledge of the roles and duties of different theatre artists and collaborators involved in a production, the elements of performance and of different theatre spaces and theatrical styles. Students will apply the communication skills needed to work in the elements of performance such as cooperation, collaboration, respect and responsibility. Students will implement theory and apply physical practice through performance design or management of theatrical work. Students will also apply various production techniques. This course is intended for students who participate as a construction or run crew member on a main stage or approved theatrical production. May be repeated twice.  
Prerequisite: None  
Corequisite: None  

**THTR 1130 Stage Make-up**  
Meets MnTC Goal Area 6. In this course, students will explore the fundamental design principles, materials and application techniques of stage make-up. Starting with the basic fundamentals and continuing through special effects, the student will use skills acquired to enhance character development. Students will apply theory through practical laboratory work in stage make-up applications.  
Prerequisite: None  
Corequisite: None  

**THTR 1140 Stagecraft**  
Meets MnTC Goal Area 6. Coursework in this content area will develop a student’s knowledge of the safe use of common materials, fabrication tools and theatrical equipment. Students will explore common theatrical production techniques and the elements of theatrical design as they apply to the concepts and meanings of a script. Students will assume various roles in collaborative theatrical production, practice communicating effectively within these roles. Each student will be required to learn and observe safety rules in the scene shop and surrounding areas. Production hours are required.  
Prerequisite: None  
Corequisite: None  

**THTR 2120 Script Analysis**  
Meets MnTC Goal Area 6. Coursework in this content area will develop a student’s knowledge of dramatic literature from varying eras and cultures and literary elements as they are used in drama, such as plot structure, genre, subtext, conflict, etc. Students will use analytical writing to study and apply aesthetic principles and graphic skills involved in theatrical design. Students will develop research and rendering methods. This course will emphasize design skills as a communication tool in the collaborative process of theatrical production. Each student will be required to learn and observe safety rules in the scene shop, lighting and sound booth, and other relevant technical areas. Production work hours may be required.  
Prerequisite: None  
Corequisite: None  

**TRDR 1101 Commercial Driver’s License I**  
Students will obtain the information necessary to complete MnDOT CDL written exam.  
Prerequisite: None  
Corequisite: None  

**TRDR 1103 Commercial Driver’s License II**  
The students will obtain the knowledge and skills necessary to complete a pre-trip inspection, vehicle handling and on-road driving test needed to obtain the basic Commercial Driver’s License. Student must possess a CDL learner permit and have taken a MnDOT physical before registering for this course.  
Prerequisite: Successful completion of MnDOT CDL learner permit.  
Corequisite: None  

**TRNS 1001 Fuel Systems I**  
This course covers the basics in many types of fuel systems used on current two- and four-cycle off-road/marine equipment. Training will be in most realms of products from high-performance to standard output recreational equipment. The incorporation of fuel distribution systems is studied along with fuel make-up and its properties. Included in this course will be practices of pre-delivery, inspection and troubleshooting along on seasonal service requirements.  
Prerequisite: None  
Corequisite: None  

**TRNS 1003 Off-Road Literature and Computer Systems**  
This course is designed for proper identification of the equipment that students will be working on. Students will act upon service procedures and specifications in online manuals, proper operation of equipment through the use of electronic owners manuals and accurate parts identification through online sources of service literature.  
Prerequisite: None  
Corequisite: None  

**TRNS 1005 Off-Road Electrical Systems**  
This course introduces electrical systems used on powersports/marine equipment, focusing primarily on ignition and electrical components. Students will learn the theories of ignition, induction, AC and DC circuits, and electronic and computer controls. Emphasis will be on proper use of test equipment and system operation.  
Prerequisite: None  
Corequisite: None  

**TRNS 1006 Off-Road Vehicle Maintenance**  
This off-road maintenance course is designed to train the student on techniques of pre-maintenance of the off-road vehicle or boat. Students are encouraged to bring their personal recreational vehicle(s), use the up-to-date industry products that we offer or both. Trailer maintenance also will be covered. This is an excellent course for getting off-road equipment and boats ready for the coming winter or spring.  
Prerequisite: None  
Corequisite: None
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<th>Course #</th>
<th>Course Title</th>
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<th>Lec/Lab/OJT</th>
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<td>TRNS 1015</td>
<td>Ignition, Charging and Starter Systems Lab</td>
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<tr>
<td></td>
<td>This course is a continuation of electrical systems used on powersports/marine equipment, focusing primarily on ignition and starting components. Students will apply the theories of ignition, induction, charging and starting systems. Emphasis will be on proper use of test equipment and the flow of electricity.</td>
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<td></td>
<td>Prerequisite: TRNS1005</td>
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<td>Corequisite: None</td>
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<tr>
<td>TRNS 1016</td>
<td>Ignition, Charging and Starter Systems Theory</td>
<td>1</td>
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<td>This course is a continuation of the study of electrical and ignition systems used on both marine and powersports equipment, focusing primarily on ignition and starting systems. Students will learn the theories of ignition, induction, charging and starting systems. Emphasis will be on proper use of test equipment along with the generation and flow of electricity.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>TRNS 1100</td>
<td>Introduction to Shop Technology</td>
<td>4</td>
<td>3/1/0</td>
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<td>This course is the study of occupational safety, shop orientation procedures and power and hand tool usage. The use of shop equipment applications, fasteners, measuring instruments and service literature, along with appropriate service department etiquette, will be addressed. Four- and two-stroke engine theory along with their proper lubricants will be covered. All these will be taught and expressed with the PowerSports and Marine Industry shop experience as a basis for study.</td>
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<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>TRNS 1102</td>
<td>Introduction to Transportation</td>
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<td>1/0/0</td>
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<td>This course is the study of occupational safety, shop operation procedures, power and hand tool use, shop equipment applications, fasteners, measuring instruments, service literature, general service knowledge, acceptable work habits, industry standards and expectations.</td>
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<tr>
<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>TRNS 1104</td>
<td>Transportation Electronics</td>
<td>3</td>
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<td>This course prepares the student for the electronics-related courses that follow. The theory and operation of electricity and test instruments will be studied.</td>
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<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>TRNS 1111</td>
<td>Electrical Systems I</td>
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<td>This course introduces electrical systems used on powersports/marine equipment, focusing primarily on ignition and electrical components. Students will learn the theories of ignition, induction, AC and DC circuits, and electronic and computer controls. Emphasis will be on proper use of test equipment and system operation.</td>
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<tr>
<td></td>
<td>Prerequisite: None</td>
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<td></td>
<td>Corequisite: None</td>
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<tr>
<td>TRNS 1112</td>
<td>Heating Ventilation A/C</td>
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<td>1/2/0</td>
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<td>This course teaches the principles of air conditioning and its relationship to the heating system. The various types and the diagnosis of malfunctions, testing and repair are studied in the classroom. Practical experience is performed on live systems: recovering, evacuating, component replacement, charging and performance testing of the systems.</td>
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<td></td>
<td>Prerequisite: DSET1100 OR TRNS1102</td>
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<td>Corequisite: None</td>
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<tr>
<td>TRNS 1118</td>
<td>Welding I</td>
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<td>0/2/0</td>
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<td>This class introduces students to welding safety, welding and cutting fundamentals. The course provides the theory of welding and the training to develop the necessary skills to cut and weld metal.</td>
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<td>TRNS 1120</td>
<td>Welding II</td>
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<td>This course teaches skills needed to weld metals in a variety of positions using various methods of welding. The class will also introduce aluminum welding.</td>
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<td>Corequisite: None</td>
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<td>TRNS 1125</td>
<td>Starting and Charging Theory</td>
<td>2</td>
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<td></td>
<td>This course covers the service and repair of starting and charging systems for off-road products, both two- and four-stroke.</td>
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<tr>
<td></td>
<td>Prerequisite: None</td>
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<tr>
<td>TRNS 1126</td>
<td>Starting and Charging Lab</td>
<td>1</td>
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<td>This course covers the hands-on testing of starting and charging systems and their components</td>
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<td>Prerequisite: TRNS1125</td>
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<td>TRNS 1193</td>
<td>Fuel Systems II Lab</td>
<td>1</td>
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<td>This course covers the application of information learned in the Fuel Systems II Theory course. Students will apply the theories of testing the operability of fuel systems of both two- and four-stroke engines. Included in this course will be practices of predelivery, inspection and troubleshooting, along with seasonal service requirements.</td>
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<tr>
<td></td>
<td>Prerequisite: None</td>
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<td>TRNS 1194</td>
<td>Fuel Systems II Theory</td>
<td>2</td>
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<td>This course covers the basics in marine types of fuel systems used on content two- and four-cycle off-road/marine products. Training will be on most realms of models from high-performance to standard output recreational equipment. The incorporation of fuel distribution systems is studied, along with fuel make-up and its properties.</td>
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<td>TRNS 1195</td>
<td>Fuel Systems I Marine Service</td>
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<td>This course covers the application of information learned in the Fuel Systems I Theory course. Students will apply the theories of testing the operability of the fuel systems of both two- and four-stroke engines. Included in this course will be practices of pre-delivery, inspection and troubleshooting, along with seasonal service requirements. This course is intended for the Marine student and will be focusing on marine equipment.</td>
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<td>Electrical Systems I Lab</td>
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<td>This course introduces electrical systems used on powersports/marine equipment, focusing primarily on ignition and electrical components. Students will learn the theories of ignition, induction, AC and DC circuit, and electronic and computer controls. Emphasis will be on proper use of test equipment and system operation.</td>
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<td>TRNS 1198</td>
<td>Electrical Systems I Theory</td>
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<td>This course introduces electrical systems used on powersports/marine equipment, focusing primarily on ignition and electrical components. Students will learn the theories of ignition, induction, AC and DC circuit, and electronic and computer controls. Emphasis will be on proper use of test equipment and system operation.</td>
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<td>TRNS 1999</td>
<td>Electrical Systems I Marine Service</td>
<td>2</td>
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<td></td>
<td>This course applies the information learned in the Electrical Systems I Theory course. Students will test charging systems, ignition systems and starting systems for their proper functionality. Students will also be exposed to proper troubleshooting techniques for these systems.</td>
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<td>TRNS 2108</td>
<td>Power Hydraulics</td>
<td>2</td>
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<td>This course covers the theory and service of hydraulic systems used on a wide range of off-road applications. Power steering and power trim and tilt systems service will be provided. System troubleshooting as well as component service will also be included in this course.</td>
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<td>WEBD 1000</td>
<td>Foundations of Web Design</td>
<td>3</td>
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<td>In this course, students will be introduced to the foundational concepts necessary for a career in Web design. Students will explore the Web Design &amp; Development program, research career paths and review technical skills needed to succeed in the field. Students will explore the foundational concepts of design as they apply to the Web design field.</td>
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<td>WEBD 1010</td>
<td>HTML</td>
<td>3</td>
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<td>In this hands-on course, students will learn the basics of creating Web pages using up-to-date techniques with hypertext markup language (HTML) and cascading stylesheets (CSS). Students will learn to create standards-based Web pages that are cross-browser compliant and make their websites available on the Web by uploading pages to a Web server.</td>
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<td></td>
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<td>WEBD 1020</td>
<td>Photoshop</td>
<td>3</td>
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<td>This project-based course provides the fundamentals of Web graphics using Adobe Photoshop. Students will learn how to create and enhance digital images with composites, layers, masks and filters by working with vector and raster images. Emphasis will be placed on optimizing images for Web and mobile delivery, as well as using Photoshop as a tool in the Web design process.</td>
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<td>WEBD 1030</td>
<td>Multimedia</td>
<td>3</td>
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<td>This course will examine a variety of multimedia tools used to create and deliver multimedia content for Web and mobile applications. Students will learn how to incorporate text, graphics, animation, sound and video into Web applications while adhering to Web standards. Timeline-based creation of animation, video and sound will be emphasized. Several platforms, software packages, hardware devices, browsers and Web services will be discussed.</td>
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<td>Foundations of Web Development</td>
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<td>WEBD 1110</td>
<td>Cascading Style Sheets</td>
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<td>WEBD 1120</td>
<td>User Experience Design</td>
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<td>WEBD 1130</td>
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<td>WEBD 1140</td>
<td>JavaScript</td>
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<td>WEBD 1150</td>
<td>PHP and MySQL</td>
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<td>WEBD 2000</td>
<td>Web Projects I</td>
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<td>WEBD 2010</td>
<td>Content Management Systems</td>
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<tr>
<td>WEBD 2020</td>
<td>User Interface Design</td>
<td>3</td>
<td>1/2/0</td>
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<tr>
<td>WEBD 2030</td>
<td>Search Engine Optimization</td>
<td>3</td>
<td>1/2/0</td>
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<td>WEBD 2040</td>
<td>Web Applications I</td>
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<td>Introduction to Women's Studies</td>
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<td>Immunohematology</td>
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<td>ZOO 1126</td>
<td>Urinalysis and Body Fluids</td>
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Fergus Area College Foundation

Chad Miller, President
Krekelberg Law Firm

Greg Wagner, Vice President
West Central Initiative

Kevin King, Secretary
Service Food Market

Jean McKenzie, Treasurer
Emeriti Faculty M State - Fergus Falls Campus

Brooke Barsness
Kaddatz Galleries

Brian Boss
Otter Tail Power Company

Steve Brimhall
Minnesota Motor Company

Dawn Clark
Ottertail Minn-Dakoa Coaches

Scott Colbeck
Independent School District #544

Aaron Grove

Terry Lejcher
Retired – Minnesota Department of Natural Resources

Pam Phillips
Retired Staff M State - Fergus Falls Campus

Greg Smith
Lake Region Healthcare

Scott Wagnild
Northern Lakes Dental

Evan Westra
West Tool & Design

Jim Worner
Investment Realty

Ex-Officio:
Lori Larson, Executive Director
Fergus Area College Foundation

Dr. Peggy D. Kennedy, M State President

Carrie Brimhall, M State Vice President/
Chief Academic Officer

Foundation Staff:

Jacki Maethner, Assistant
Fergus Area College Foundation

Robert Anderson, Financial Manager
M State Foundation
and Alumni

Terinne Berg, President
Premier Benefits Group

Nick Leonard, Vice President
Otter Tail County

Ron Mueller, Treasurer
Bremer Bank

Shelley Finney, Secretary
Retired - WW Wallwork, Inc.

Laura Boreen
Ecumen

Tyler Church
Independent School District #2155

Chad Coauette
National Joint Powers Alliance

David Fjeldheim
Independent School District #820

Curt Kasper
National Electric Contractors Association

Ashley McNally
Ecumen

Chad Miller
Krekelberg, Skonseng & Miller, P.L.L.P.

Kenny Useldinger
RDO Truck Centers

Greg Wagner
West Central Initiative

Dr. Peggy D. Kennedy
Minnesota State Community and Technical College

Foundation Staff:

Denise Laymon
Chief Development and Alumni Officer

Caitlin Stoecker
Development Officer

Ann Olson
Foundation Associate

Patty Ekren
Foundation Financial Specialist
MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE
Administration Credentials

Kennedy, Peggy D ..............................................President
BS, University of Wisconsin - Whitewater
MA, University of Minnesota
EdD, University of Minnesota

Abbott, Jill M ..................................................Associate Vice President of Academic and Student Affairs
BS, Southwest State University
MS, South Dakota State University
EdD, University of South Dakota

Anderson, Shawn A .......................................Dean of Student Success
BS, Minnesota State University Moorhead
MS, Central Connecticut State University

Borcherding, Matthew John ....................... Dean of Academic Affairs
BS, Minnesota State University Moorhead
MAT, Minnesota State University, Mankato

Brimhall, Carrie Lee ............ Vice President/Chief Academic Officer
AA, Fergus Falls Community College
BA, Concordia College
MS, Capella University
PhD, Capella University

Doyle, Holly ............. Associate Dean of Health and Human Services
AA, Ridgewater College
BA, University of Washington
MAT, City University

Erickson, Steven ......................... Dean of Academic Affairs
MS, University of California-Davis
BSE, University of Iowa

Jacobson, Jennifer Lynn ......................... Dean of Health Careers
BSN, Minot State University
MSN, University of South Alabama

Johnson, Dacia A ........................ Chief Human Resources Officer
BS, Minnesota State University Moorhead
MBA, Southwest Minnesota State University

Johnson, Monty V ....................... Dean of Academic Affairs
BE, Wayne State College
MED, Iowa State University

Knudson, Daniel L ....................... Chief Information Officer
BS, Minnesota State University Moorhead

Laymon, Denise Ann .. Chief Development and Alumni Officer
BS, University of Mary
MS, University of Mary
MBA, University of Mary

Mathers, Angela ............. Dean of Academic Quality and Support
BA, North Dakota State University
MS, North Dakota State University

Nordick, Patrick A ....................... Chief Finance Officer
BS, Bemidji State University

Tucker, G.L .................. Executive Director-Workforce Development Solutions
BS, St. Cloud State University

Ward, Carrie M ....................... Dean of Academic Affairs
BS, Minnesota State University Moorhead
MA, Minnesota State University Moorhead

Wielinski, Peter A .......................... Vice President/Chief Student Development Officer
BA, University of Minnesota
MSED, University of Wisconsin-Superior
PhD, Capella University
<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Ahlschlager, Patricia M</td>
<td>Nursing BS, Metropolitan State College of Denver MS, Minnesota State University Moorhead</td>
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<td>Amundson, Sarah</td>
<td>Nursing BSN, North Dakota State University</td>
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<td>Anderson, Heidi Rochelle</td>
<td>English AA, Minnesota State Community and Technical College BA, St. Cloud State University MA, St. Cloud State University MA, Minnesota State University-Moorhead</td>
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<td>Anderson, Marc David</td>
<td>Biology BS, North Dakota State University MS, North Dakota State University PhD, Iowa State University</td>
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<td>Anderson, Sue Christine</td>
<td>Art BS, Minnesota State University Moorhead MS, Minnesota State University Moorhead</td>
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<td>Anderson, Terri</td>
<td>Nursing MSN, Capella University BSN, University of North Dakota</td>
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<td>Andres, Rebecca</td>
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<td>Ashworth, Teresa K</td>
<td>Music BA, University of South Dakota MED, North Dakota State University</td>
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<td>Bagent, Jack Kevin</td>
<td>Science BA, University of Minnesota DR, University of Minnesota</td>
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<td>Bagent, Karoline Lisa</td>
<td>Nursing MN, University of Minnesota</td>
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<td>Bagne, Angela Grace Beach</td>
<td>Psychology MS, North Dakota State University</td>
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<td>Bainer, James Stephen</td>
<td>Diesel Equipment Technology DIPL, Staples Area Vocational Technical Institute</td>
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<td>Baker, Adam Joseph, CPA</td>
<td>Accounting AA, Fergus Falls Community College BS, Minnesota State University Moorhead</td>
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<td>Baker, Randy</td>
<td>Gas Utility Construction and Service BS, North Dakota State University MS, North Dakota State University</td>
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<td>Balluff, Mark Allen</td>
<td>Math BS, Minnesota State University Moorhead MAT, Minot State University</td>
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<tr>
<td>Banerji, Nandini</td>
<td>Science BS, University of Delhi MS, Indian Institute of Technology, Kanpur MA, Indian Institute of Technology, Delhi PhD, University of Vigo</td>
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<td>Barthel, Leon</td>
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<tr>
<td>Beacom, Teresa Ann</td>
<td>English BA, College of Saint Benedict MA, University of Missouri-Kansas City</td>
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<td>Math BS, Wichita State University PhD, Wichita State University</td>
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<td>Benson, Tim</td>
<td>Spanish MA, Universidad de las Americas-Puebla EDD, University of St. Thomas BA, University of Wisconsin- Superior</td>
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<td>Berg, Erica</td>
<td>Nursing AS, Rochester Community and Technical College AA, Minnesota State Community and Technical College BSN, University of Phoenix</td>
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<td>Bernstetter, Roberta A</td>
<td>Cosmetology AA, Fergus Falls Community College DIPL, Northwest Technical College - Wadena BS, Bemidji State University</td>
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<td>Beske, Teresa</td>
<td>Medical Laboratory Technician BS, Minnesota State Community and Technical College</td>
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<td>Beyer, Jennifer Ann</td>
<td>English BA, Bemidji State University MA, Bemidji State University</td>
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<td>Binkard, David</td>
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<td>Bjorke, M Shawn</td>
<td>Biology BS, North Dakota State University MS, North Dakota State University</td>
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</table>
Bocnuk, Cheryl L .............................................. Web Development
AA, Rainy River Community College
BA, St. Cloud State University
MMA, Metropolitan State University

Booth, Michael ....................................................... Math
BS, North Dakota State University
MS, North Dakota State University

Brickner, Joan Marie .................................................. English
ALA, Wayne State University
BA, Wayne State University
MA, Eastern Michigan University

Bry, Jeff D .................................................................. Sociology
BS, University of North Dakota
MA, University of North Dakota

Bucholz, Glen A .................................................... Marine Engine Technology
DIPL, Detroit Lakes Technical College
BS, Bemidji State University

Burke, Mikki .......................................................... Biology
MSW, University of Minnesota - Twin Cities
PHD, University of Florida

Cantieri, Loretta ...................................................... Art
BFA, University of Illinois at Urbana
MFA, California Institute of the Arts

Carlson, Kelly J ....................................................... Medical Administrative Assistant
AA, Minnesota State Community and Technical College
AAS, North Dakota State College of Science
BS, Bemidji State University

Carter, Daniel J ........................................................ Computer and Network Technology
BS, Bemidji State University

Caswell, Ramona L. Johnson ........................................ Chemistry
BS, University of Wisconsin
MS, University of Minnesota

Charest, Lori Ann ........................................................ Ceramics
BFA, University of North Dakota

Christensen, Bryan Alan ............................................. Marketing
AAS, Minnesota State Community and Technical College
DIPL, Alexandria Technical and Community College
BS, University of Minnesota, Crookston
MBA, University of Mary
AAS, Minnesota State Community and Technical College

Christensen, Lana ............................................. Administrative Support
BA, Concordia College

Cole, Monica .......................................................... Nursing
AAS, Minnesota State Community and Technical College
AS, Alexandria Technical and Community College
BSN, College of Saint Scholastica

Coley, Amy Marie ................................................... Radiologic Technology
BS, University of Mary

Cook, Leonard .......................................................... Chemistry
MS, North Dakota State University
BA, Concordia College

Cossette, Rebecca .................................................. Psychology
MS, Capella University

Cox, John Charles ...................................................... Art
AA, Northland Community and Technical College
BFA, University of Minnesota, Duluth
MFA, University of South Dakota

Cox, Rachel Marie .................................................... English
BA, University of Minnesota, Duluth
MA, University of South Dakota

Craik, Marlene R ...................................................... Network Technology Administration, Cisco
AAS, Northwest Technical College-Moorhead
BS, University of Mary

Crowser, Abby .......................................................... Volleyball Coach
BS, Concordia College

Cummings, Pamela K ................................................ Paralegal
BS, Moorhead State University

Daeuber, Eric .......................................................... Humanities
BA, University of Western Ontario, Huron College
MDIV, Brock University
MLA, Moorhead State University

Dahms, Shannon Kaye ................................................ Nursing
BSN, Viterbo College
MSN, Minnesota State University Moorhead

Daniels, Jessica Brimhall ........................................... Biology
BA, Concordia College
MS, University of Minnesota
Davies, Heidi ............................................. Criminal Justice
BA, University of North Dakota
JD, University of North Dakota

Decker, Amanda ................................................. Psychology
BS, North Dakota State University
MS, Minnesota State University Moorhead

DeJong, Travis J ................. Refrigeration and Air Conditioning
DIPL, Minnesota State Community and Technical College

Desjarlais, Sarah ............................................. Dental
AS, Argosy University
BA, Augustana College

Deutschlander, Alena ......................... Nursing
BSN, Minnesota State University Moorhead
BA, St. Cloud State University

Dittmann, Scarlet May ......................... Massage Therapy
CERT, Minnesota State Community and Technical College
DIPL, Minnesota State Community and Technical College
CERT, Sister Rosalind Gefre

Donehower, James W ......................... Paralegal
BA, Concordia College
JD, Vanderbilt University
MSN, Minnesota State University-Moorhead

Drake, Benjamin M ................. Industrial Maintenance
AAS, Western Dakota Technical Institute

Drummond, Donald Gerard ......................... Math
BS, North Dakota State University
MAT, Minot State university

Dubbels, Thomas Kenneth ...................... Counselor
BS, North Dakota State University
MS, Moorhead State University

Durand, Heidi Lynn ......................... Sociology
BA, North Dakota State University
MS, North Dakota State University

Dykhoff, Wayne Donald ..................... Electrical Lineworker
DIPL, Minnesota State Community and Technical College

Dyrstad, Heidi L ......................... Communication
BA, Concordia College
MA, North Dakota State University
PhD, University of North Dakota

Ebsen, Michelle Ann ......................... Business: Management, Marketing and Sales
BS, University of Mary
MBA, University of Mary

Ekelund, Rebekah J ......................... Chemistry
BS, Houghton College
MS, Northeastern University

Eklund, Clyde Wayne ......................... Math
BS, Bemidji State University
MS, University of Minnesota

Elhard, Kathy ......................... Nursing
AAS, Northwest Technical College
BSN, Minnesota State University Moorhead
MSN, Minnesota State University Moorhead

Eliaison, David W ..................... Diesel Equipment Technology
DIPL, Ridgewater College
AAS, North Dakota State College of Science

Ellefson, Megan Kelly ......................... Math
BS, University of Minnesota
MS, University of North Dakota

Evans, Bill L ......................... Biology
AAS, Minnesota State Community and Technical College
AS, Minnesota State Community and Technical College
BS, The Citadel
MS, Medical College of Georgia

Fillman, Scott ..................... Web Design
BA, Metropolitan State University
AAS, Minnesota State Community and Technical College

Fjeld, Dixie L ......................... Administrative
BA, Concordia College
MA, University of St. Thomas

Flaskerud, Debra L ......................... Computer Programming
BS, Moorhead State University
MED, North Dakota State University

Freeman, Roberta J ......................... Communication
AA, Bemidji State University
BS, Bemidji State University
MS, Bemidji State University
MA, North Dakota State University

Frider, Debra K ......................... Dental Hygiene
AS, North Dakota State School of Science

Ebsen, Michelle Ann ......................... Business: Management, Marketing and Sales
BS, University of Mary
MBA, University of Mary

Ekelund, Rebekah J ......................... Chemistry
BS, Houghton College
MS, Northeastern University

Eklund, Clyde Wayne ......................... Math
BS, Bemidji State University
MS, University of Minnesota

Elhard, Kathy ......................... Nursing
AAS, Northwest Technical College
BSN, Minnesota State University Moorhead
MSN, Minnesota State University Moorhead

Eliaison, David W ..................... Diesel Equipment Technology
DIPL, Ridgewater College
AAS, North Dakota State College of Science

Ellefson, Megan Kelly ......................... Math
BS, University of Minnesota
MS, University of North Dakota

Evans, Bill L ......................... Biology
AAS, Minnesota State Community and Technical College
AS, Minnesota State Community and Technical College
BS, The Citadel
MS, Medical College of Georgia

Fillman, Scott ..................... Web Design
BA, Metropolitan State University
AAS, Minnesota State Community and Technical College

Fjeld, Dixie L ......................... Administrative
BA, Concordia College
MA, University of St. Thomas

Flaskerud, Debra L ......................... Computer Programming
BS, Moorhead State University
MED, North Dakota State University

Freeman, Roberta J ......................... Communication
AA, Bemidji State University
BS, Bemidji State University
MS, Bemidji State University
MA, North Dakota State University

Frider, Debra K ......................... Dental Hygiene
AS, North Dakota State School of Science
Froslee, Mick ............................................................ Psychology
MA, Webster University
PHD, Walden University

Frueh, Jaclyn .......................................................... Dental Hygiene

Fry, Korey ............................................................ Football Coach
AS, North Dakota State School of Science

Furstenau, Stephanie .......................... Nursing
AAS, Minnesota State Community and Technical College
AS, Minnesota State Community and Technical College
BSN, Arizona State University

Gagnon, Shawn .......................................................... English
BA, Bemidji State University
MA, Bemidji State University

Ganyo, Jennifer .......................................................... English
BA, University of Minnesota, Morris
MFA, Minnesota State University Moorhead

Gausman, Thomas A, MFA ............. Economics, Business
BA, University of Minnesota, Morris
MA, Northern Illinois University
MS, Northern Illinois University

Geist, Gerald .............................................. American Sign Language

Gerhardson, Stefanie Leigh ......................... Theatre
BS, Bemidji State University
BA, Bemidji State University

Gilbertson, David ........................................ Equine Science

Godzinski, Ronald Peter ....................... Philosophy
BA, California State University - Chico
MA, Colorado State University

Goos, Alan .................................................. Chemistry
BS, University of North Dakota
PhD, Syracuse University

Goracke, Kristen ........................................ English
MA, Spring Arbor College
BA, Luther College

Green, John .............................................. Civil Engineering Technology
MBA, California State University, Long Beach
BS, North Dakota State University

Grubb, Darrin F ........................................ Economics
BA, Minnesota State University Moorhead
MBA, Minnesota State University Moorhead

Haagenson, Dana LaRae .......... Accounting and Human Resources
BS, Minnesota State University Moorhead

Haagenson, Loren M ..................... Human Resources
AA, Northland Community College
BS, Minnesota State University Moorhead
MM, University of Mary

Haaland, Kathleen ..................... Health Information Technology
AAS, Minnesota State Community and Technical College
BS, University of Mary

Haataja, Keith ......................... Electrical Technology
Diploma, Minnesota State Community and Technical College

Hagen, LeRoy Dean .................. Dental Hygiene
DDS, School of Dentistry Marquette University

Halling, Melissa ......................... Math
BS, North Dakota State University
MA, Eastern Kentucky University

Haltli, Russell Alan ....................... Electrical Technology
AAS, North Dakota State College of Science

Hanna, Susan ..................... Health Information Technology
AS, Minnesota State University Moorhead
BS, Minnesota State University Moorhead

Hansen, Carla ..................... Nursing
BSN, University of Wisconsin Eau Claire
MS, University of Illinois Chicago

Hanson, Kenneth C .................. English
BS, Dickinson State University
MFA, Minnesota State University Moorhead

Hanson, Nancy C .................. English
AS, Minnesota State University Moorhead
BA, Minnesota State University Moorhead
MA, North Dakota State University

Hanson, Nancy ..................... Dental Hygiene
CERT, North Dakota State College of Science
AS, North Dakota State College of Science

Hanstad, Tanya J ......................... Math
BA, Concordia College
MS, North Dakota State University

Heikes, David Arnold ..................... English
BS, University of South Dakota
MA, Western Washington University
MA, University of South Dakota
Hendrickson, Janice ........................................ Basketball Coach
DIPL, Minnesota State Community and Technical College
AA, Minnesota State Community and Technical College
AAS, Minnesota State Community and Technical College

Hensel, Jeremy ........................................... Electrical Line Worker
DIPL, Northwest Technical College

Hetland, Mary ............................................. Psychology
BA, Concordia College
MS, Moorhead State University

Hibma, Jody Carroll ...................................... Biology
AS, Worthington Community College
BS, South Dakota State University
MS, Central Michigan University

Hilton, Kristi Marie ....................................... American Sign Language
AAS, Southeast Technical Institute
BA, Minnesota State University Moorhead
MS, Minnesota State University Moorhead

Hinrichs, Andrew J ..................................... Equine Science
BS, University of Minnesota, Crookston

Hintermeister, Melissa J ................................ Graphic Design Technology
BA, Concordia College

Hjalmquist, Dave C ..................................... Computer Programming
DIPL, Northwest Technical College-Moorhead
DIPL, Northwest Technical College-Moorhead

Hoekstra, Matthew ..................................... History
MS, North Dakota State University

Holmquist, Sherrie L .................................... Business: Management, Marketing and Sales
AAS, University of Minnesota, Crookston
MS, University of North Dakota

Hughes, Alan S ......................................... Electrical Technology

Hughes, Cody ............................................. Baseball Coach
BS, Minnesota State University Moorhead

Iverson, James .......................................... Music
BA, Concordia College
MS, Southwest State University

Jensen, Crystal Rae ..................................... English
BA, Minnesota State University Moorhead
MFA, Minnesota State University Moorhead

Jesser, Joanna K ......................................... Information Technology
BSED, Mayville State University

Johnson, Brenda Kay .................................... Architectural Drafting and Design
AAS, Minnesota State Community and Technical College
BS, Minnesota State University-Moorhead

Johnson, Deb F ........................................... Custom Training
BS, Moorhead State University

Johnson, Eric A .......................................... Art
BS, North Dakota State University
MFA, University of North Dakota

Johnson, Erin Elizabeth ................................ Biology
BA, Augustana College
PhD, University of Delaware

Johnson, Jay E ............................................. Math
BA, University of Minnesota, Morris
MAT, University of Wisconsin Eau Claire

Johnson, Keith ............................................ Construction Management
DIPL, Moorhead Area Technical Institute
BS, Minnesota State University Moorhead

Johnson, Mark A .......................................... Electrical Technology
Diploma, Moorhead Area Vocational Technical Institute

Johnson, Mark L ............................................ Political Science and History
BA, University of North Dakota
MA, Louisiana State University and Agricultural and Mechanical College

Johnson, Robert P ........................................ Graphic Design Technology
DIPL, Northwest Technical College-Moorhead

Johnson, Sheri A ......................................... Communication, Theatre
BA, South Dakota State University
MS, South Dakota State University
MA, South Dakota State University

Juelich, Janell ............................................. Nursing
BSN, North Dakota State University
MSN, Minnesota State University-Moorhead

Kaiser, Lynn Renee ..................................... Business: Management, Marketing and Sales
BS, Minnesota State University Moorhead
MMA, University of Mary

Kallinen, Brian P .......................................... Nursing
AS, Northland Community and Technical College
BSN, Minnesota State University-Moorhead
Faculty Credentials

Keller, Brian, CPA ........................................... Accounting
AS, North Dakota State College of Science
BS, North Dakota State University

King, Steven J ........................................... Physical Education, Athletic Director
AA, Fergus Falls Community College
BA, St. Cloud State University
MA, Northern State University

Kitch, Travis .................................................. Anthropology
BA, Minnesota State University Moorhead
BS, North Dakota State University
MS, North Dakota State University

Knoke, Karen R ................................................ Math
BS, Moorhead State University
MA, University of St. Thomas

Knutson Cirks, Rae ............................................ Surgical Technology
Diploma, East Grand Forks Area Vocational Technical Institute

Kraft, Colleen F ............................................ Culinary Arts
DIPL, Northwest Technical College-Moorhead

Kummrow, Scott ........................................... Music
BA, Concordia College
MS, Southwest State University

Lacher, Marcus J ............................................ Business/Computers
BS, Minnesota State University Moorhead
MA, University of St. Thomas
MBA, Southwest Minnesota State University

Lahti, Kitty ..................................................... Biology
BS, Michigan State University
MS, Virginia Tech

Lamey, Camelia ................................................ Biology
BA, University of Minnesota
MS, University of Oklahoma

Larsen, Gary .................................................... Fire Service
AAS, Duluth Technical College

Larsen, Nathanael ............................................ Psychology
BA, Minnesota State University Moorhead
BS, Moorhead State University
MS, North Dakota State University
MS, North Dakota State University
PhD, Capella University

Lee, Patrick M ................................................... Electrical Technology
DIPL, Wadena Area Vocational Technical Institute

Lindgren, Steven G ................................................ Psychology
BS, Northern State University
MS, South Dakota State University

Line, Donald ................................................... Electrical Technology
DIPL, Wadena Area Vocational Technical Institute

Loveland, Richard Alan ........................................ Fire Service
AAS, Lake Superior College

Lovgren, Jennifer Elizabeth ................................ Communication
BS, North Dakota State University
MA, North Dakota State University

Lundborg, Shelley Kay ...................................... Business
BA, Concordia College
MS, Minnesota State University Moorhead
MBA, University of Mary

Lutgen, Emily R ................................................ Biology
BA, Grinnell College
MS, University of Montana-Missoula

Maloney, Todd ............................................. Refrigeration and Air Conditioning
DIPL, Moorhead Area Vocational Technical Institute

Massen, Christie ............................................ Medical Laboratory Technician
MS, University of North Dakota
BS, University of North Dakota

Melvin, Jenni ..................................................... Biology
BS, South Dakota State University
MS, University of Nebraska
Teaching Certificate, Northern State University- Aberdeen

Miller, Dennis M .............................................. Automotive Service Technology
BS, Valley City State University

Mohn, Shannon Dale ........................................ Automotive Service Technology
AAS, Hennepin Technical College

Mohr, Angie Kay ............................................. Nursing
AAS, College of Saint Catherine-Minneapolis
BS, North Central University
MSN, University of Minnesota

Monroe, Shannon ............................................ Criminal Justice
AAS, Alexandria Technical and Community College
BS, University of Mary
Moore, Cynthia L ........................................... Nursing
DIPL, Fergus Falls Community College
AS, Fergus Falls Community College
BSN, Minnesota State University Moorhead
MSN, Minnesota State University Moorhead

Morstad, Tracy L .......................................... Nursing
BSN, Southern Illinois University
MSN, University of Mary

Mrazek, Joseph A .............................. Drafting and 3D Technologies
AA, Brainerd Community College
BS, Bemidji State University
MS, Bemidji State University

Murray, Ashley ......................................... Nursing
BSN, North Dakota State University
MSN, University of North Dakota

Murphy, Thomas James ........................... Anthropology
BS, Black Hills State University
BS, Minnesota State University, Mankato
MS, Minnesota State University, Mankato

Neece, Shari L ........................................... English
BS, Minnesota State University Moorhead
LIC, Moorhead State University
MA, North Dakota State University

Nelson, Jeffrey O ...................................... Criminal Justice
AA, Northland Community College
BA, Minnesota State University Moorhead

Neuenfeldt, Phyllis H ................................. Math
BSED, North Carolina State University at Raleigh
MED, East Carolina University

Nevala, David E ............................. Heating, Ventilation and Air Conditioning
DIPL, Western Iowa Technical and Community College

Nielsen, Laurel A ..................................... Sociology
BS, Mayville State University
MA, North Dakota State University

Nikolas, Arlin D ....................................... History
BA, Moorhead State University
MS, North Dakota State University

Olek, Sarah ........................................... Cardiovascular Technology
AAS, Northland Community and Technical College

Oliver, Nikki ........................................... Nursing
AA, Minnesota State Community and Technical College
AS, Minnesota State Community and Technical College
AAS, Minnesota State Community and Technical College
BSN, Minnesota State University Moorhead

Olson, David D ......................................... Math
BSED, Valley City State University
MAT, Minot State University

Otto, Teresa U ........................................ English
BS, Bemidji State University
MS, University of Wisconsin-Stout
MA, Hamline University

Palmer, Rebecca .......................... Medical Administrative Assistant
AAS, Minnesota State Community and Technical College

Parker, Anthony J .................................. Business Entrepreneurship
BSB, University of Minnesota
MBA, Colorado State University-Pueblo

Parta Arno, Jennifer ....................... Psychology
BA, University of Minnesota
MS, Minnesota State University Moorhead

Patrick, Judy A, CPA ............................... Accounting
BBA, University of New Mexico-Anderson/Man
MBA, Metropolitan State University

Pederson, Brooks ............................. Construction Management
BS, North Dakota State University

Peltier, Robin Theresa ......................... Dental
AAS, Minnesota State Community and Technical College
BSDH, Minnesota State University Mankato

Petermann, Shana R ............................. Biology
BS, North Dakota State University
MS, North Dakota State University

Petersen, Justin ..................................... ELL
BA, American Military University
MA, Azusa Pacific University

Peterson, Bonnie ................................. Health Information Technology
BA, College of Saint Scholastica
MS, College of Saint Scholastica

Peterson, Jason ................................. Information Technology
BS, North Dakota State University
MS, North Dakota State University
Peterson, Greg R ...................................................... Diesel Equipment Technology  
DIPL, Northwest Technical College-Moorhead

Pladson, Kristie G ...................................................... Dental  
DIPL, Rochester Community College  
AS, North Dakota State College of Science  
BS, Valley City State University  
MS, Minnesota State University Moorhead

Potter, Brenda A ..................................................... Medical Administrative Assistant  
BS, Moorhead State University

Preuss, Tim ........................................................... Information Technology  
BS, Concordia College  
MED, North Dakota State University

Priebe, Kevin .......................................................... Music  
BS, University of Wisconsin-River Falls  
MA, University of Iowa  
DMA, Cleveland Institute of Music

Prieve, Thomas M ...................................................... Equine Science  
BS, University of Minnesota  
DVM, University of Minnesota

Quamme, Kent ........................................................... Business  
BS, Dickinson State University  
MS, University of North Dakota

Rach-Sovich, Sarah ...................................................... Psychology  
AA, Fergus Falls Community College  
BS, St. Cloud State University  
MS, St. Cloud State University

Redlin, Jennifer Anne .................................................. Psychology  
BS, North Dakota State University  
MS, North Dakota State University

Reed, Amber L .......................................................... Nursing  
DIPL, Fergus Falls Community College  
AS, Fergus Falls Community College  
BSN, Minnesota State University Moorhead  
MSN, Minnesota State University Moorhead

Reisenauer, Kent James .............................................. PowerSports Technology  
AAS, North Dakota State College of Science

Retzlaff, Jason .......................................................... Physical Education  
AA, Fergus Falls Community College  
BS, North Dakota State University  
MS, North Dakota State University

Ripplinger, Scott C ...................................................... Automotive Service Technology  
DIPL, East Grand Forks Technical Institute

Roberts, Randy R ...................................................... Architectural Drafting and Design  
DIPL, Northland Community and Technical College

Robertson, Maronda Sue ............................................. Counselor  
BS, University of Wisconsin-Madison  
MS, Minnesota State University, Mankato

Rocholl, Leah ............................................................ Nursing  
BSN, Minnesota State University Moorhead

Roers, Mary B ............................................................ Nursing  
AS, Fergus Falls Community College  
ADN, Northland Community College  
BSN, Moorhead State University  
MSN, University of North Dakota

Samuelson, Kimberle Rae ......................................... Health Information Technology  
DIPL, Northwest Technical College-Moorhead  
AS, Minnesota State University Moorhead

Samuelson, Michelle .................................................. Dental Hygiene  
AAS, Minnesota State Community and Technical College  
BS, Minnesota State University, Mankato

Saraswathiamma, Manjusha T ..................................... Chemistry  
BSC, Mahatma Gandhi University - India  
MS, Mahatma Gandhi University - India  
MS, Cochin University of Science and Technology  
PhD, North Dakota State University

Scheller, Monte ..................................................... Electrical Line Worker  
DIPL, Northwest Technical College - Wadena  
CERT, Wadena Area Vocational Technical Institute

Schirmer, Diana ...................................................... English  
BA, Minnesota State University Moorhead  
MFA, Minnesota State University Moorhead

Shepard, Jana Lee ..................................................... English  
BA, St. Cloud State University  
MA, St. Cloud State University

Shumake, Crystal K ..................................................... Dental Assisting  
CERT, North Dakota State College of Science  
AAS, Lake Superior College  
BS, Minnesota State University Moorhead

Smith Carlson, Natalie ................................................ English  
BA, Minnesota State University Moorhead  
MA, North Dakota State University
Faculty Credentials

Smith, Leretta May ......................... Sociology
BS, North Dakota State University
MS, North Dakota State University
PhD, South Dakota State University

Solberg-Herbel, Lindsey .................. American Sign Language
Certificate, Fort Range Community College
AAS, Southeast Technical Institute

Sorenson, Shawn ......................... Basketball Coach
BS, St. Cloud State University
AA, Fergus Falls Community College

Steele, Keely ................................. Sales and Marketing
BS, University of Mary
MS, University of Mary

Stevenson, Angela ....................... Surgical Technology
AS, Excelsior College

Stigen, Nancy E, CMA .................... Accounting
AA, Moorhead Area Vocational Technical Institute
BS, Moorhead State University
MFA, Minnesota State University-Moorhead
MS, Minnesota State University-Moorhead

Stoa, Sydney ................................. Dental Hygiene
AAS, North Dakota State College of Science
AS, North Dakota State College of Science
BS, Minnesota State University, Mankato

Stoddard, David ............................ Music
MME North Dakota State University

Stowman, Shelly ......................... Communication
BA, California State University - Los Angeles
MBA, Baker University College of Arts and Science
PhD, North Dakota State University

Sutor, Debroah ............................. Education
BA, University of Minnesota, Morris
BS, University of Minnesota, Twin Cities
MA, University of St. Thomas

Swedberg, Marilyn ........................ Psychology
AA, Fergus Falls Community College
BA, Moorhead State College
MS, St. Cloud State University

Synstelien, Loren A ..................... Psychology
AA, Fergus Falls Community College
BA, Concordia College
MSW, University of Connecticut- School of Social Work

Szczech-Johnson, Janet D ................ Network Administration and Security, Cisco
DIPL, Wadena Area Vocational Technical Institute
BS, Bemidji State University
MS, Bemidji State University

Taylor, Adam ................................... Philosophy
PhD, University of Buffalo

TenEyck-Stafki, Susan D ............... Child Care and Education
BS, Moorhead State University
LIC, Moorhead State University
MS, Moorhead State University

Ternes, Lindsey ......................... Criminal Justice
BS, North Dakota State University

Thompson, Fonda Ruth .................. Medical Transcription
DIPL, Northwest Technical College-Moorhead

Thompson, Scott ......................... Plumbing

Thormodson, Amanda ................... Pharmacy
BS, Minnesota State Community and Technical College
BS, North Dakota State University
BH, North Dakota State University

Thorstenson, Anthony .................. Philosophy
BA, University of Minnesota, Duluth
MA, Ohio University

Tietz, Anna ................................. Child Care and Education
BS, University of Minnesota-Crookston

Toenges, Randall ......................... Culinary Arts
BA, Le Cordon Bleu College of Culinary Arts
BA, University of St. Thomas

Trombley, Kathryn M .................... Communication
BS, Saint John Fisher College
MA, Central Michigan University

Ulimer, Mike W ....................... Marine Engine Technology
DIPL, Northwest Technical College
DIPL, Northwest Technical College
AAS, Fergus Falls Community College
BS, Bemidji State University

Vigesaa, Lori ................................. American Sign Language
BA, Ashford University
MS, Minnesota State University Moorhead
Faculty Credentials

Vigesaa, Tami .................................................. Sociology
MED, University of Minnesota Twin Cities
MA, University of North Dakota

Waldera, Michele Lee .................................. Accounting
AAS, Metropolitan Community College
BBA, Bellevue University
MBA, Bellevue University

Walters, Cedar ............................................. Biology
AA, Minneapolis Community and Technical College
MS, North Dakota State University

Walters, Christopher A .......................... English
BA, University of Minnesota
MA, State University of New York at Buffalo

Walton, Grant ........................................ Electrical Line Worker
Diploma, Minnesota State Community and Technical College

Weber, Richard T .................................. Diesel Equipment Technology
DIPL, North Dakota State College of Science

Weibye, Darlene K ...................................... Cosmetology
DIPL, Wadena Area Vocational Technical Institute

Whitney, Sara Lynn ................................. Communication
AA, Bismarck State College
AAS, North Dakota State University
BS, North Dakota State University
MA, North Dakota State University

Wika, Sue T ........................................... Sociology
BS, South Dakota State University
MSC, University of Reading
PhD, South Dakota State University

Williams, Marcia E ................................. Accounting
ASBA, North Dakota State College of Science
BSBA, University of North Dakota

Willoughby, Daniel R ................................. Math
BS, Minnesota State University Moorhead
MS, Northern Arizona University

Wolden, Diane M ................................. Nursing
BSN, College of Saint Benedict
MPH, University of Minnesota

Zachariason, Robert J .............................. Electrical Technology
DIPL, Northwest Technical College

Zirbes, Joan M ...................................... Administrative Support
BS, Moorhead State University
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Lynn Aasen</td>
<td>General Maintenance Worker</td>
</tr>
<tr>
<td>Megan Adamczyk</td>
<td>K-12 Collaboration Manager</td>
</tr>
<tr>
<td>Sharlene Allen</td>
<td>College Registrar</td>
</tr>
<tr>
<td>David Anderson</td>
<td>General Maintenance Worker</td>
</tr>
<tr>
<td>Douglas Andring</td>
<td>Assistant Human Resources Director</td>
</tr>
<tr>
<td>Rhonda Bahls</td>
<td>Administrative Assistant</td>
</tr>
<tr>
<td>Laura Baier</td>
<td>Academic Advisor</td>
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<tr>
<td>Lynn Bakke</td>
<td>Call Center Resource Specialist</td>
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<tr>
<td>Heidi Balgaard</td>
<td>Human Resources Associate</td>
</tr>
<tr>
<td>Nicole Ballard</td>
<td>Administrative Assistant</td>
</tr>
<tr>
<td>Tina Bartels</td>
<td>Senior Graphic Designer</td>
</tr>
<tr>
<td>Bonnie Baumgardner</td>
<td>Campus Resource Specialist</td>
</tr>
<tr>
<td>Paul Beah</td>
<td>General Maintenance Worker</td>
</tr>
<tr>
<td>Allen Behr</td>
<td>Director of Business Services</td>
</tr>
<tr>
<td>Richard Bellefeuille</td>
<td>General Maintenance Worker</td>
</tr>
<tr>
<td>Alecia Bement</td>
<td>Administrative Assistant</td>
</tr>
<tr>
<td>Rachel Bergerud</td>
<td>Bookstore Coordinator/Account Clerk</td>
</tr>
<tr>
<td>Jennifer Bieniek</td>
<td>Academic Advisor</td>
</tr>
<tr>
<td>Patrick Billodeau</td>
<td>Front End Web Developer</td>
</tr>
<tr>
<td>Joanne Bokinskie</td>
<td>Assistant to the Vice President of Student Development and Marketing</td>
</tr>
<tr>
<td>Mary Braunberger</td>
<td>Exam Monitor</td>
</tr>
<tr>
<td>Christian Brezinski</td>
<td>Director of Student Development Services</td>
</tr>
<tr>
<td>Laurie Brekke</td>
<td>Campus Resource Specialist</td>
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<tr>
<td>Denice Brewer</td>
<td>Administrative Assistant</td>
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<tr>
<td>Shannon Britten</td>
<td>Enrollment Manager</td>
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<tr>
<td>Penny Brynildson</td>
<td>Academic Advisor</td>
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<tr>
<td>Karen Buboltz</td>
<td>Director of Student Development Services</td>
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<tr>
<td>Michele Burns</td>
<td>Academic Advisor</td>
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<tr>
<td>Alyssa Campion</td>
<td>Interim Director of Admissions and Outreach</td>
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<tr>
<td>Pamela Canning</td>
<td>Campus Resource Specialist</td>
</tr>
<tr>
<td>Thomas Capistran</td>
<td>Facilities Services Supervisor</td>
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<tr>
<td>Janice Carpenter</td>
<td>Purchasing Account Clerk</td>
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<td>Kevin Clark</td>
<td>General Maintenance Worker</td>
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<tr>
<td>Janine Corbin</td>
<td>Accounts Payable Specialist</td>
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<tr>
<td>Tori Covington</td>
<td>Account Clerk Senior/ Campus Administrative Support</td>
</tr>
<tr>
<td>Tracy Crawford</td>
<td>IT Help Desk</td>
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<tr>
<td>Abby Crower</td>
<td>Solution Center Resource Specialist</td>
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<tr>
<td>Deborah Dague</td>
<td>Associate Registrar</td>
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<tr>
<td>Bonnie Dahring</td>
<td>Associate Director, Financial Aid</td>
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<tr>
<td>Christopher DeBaere</td>
<td>IT Help Desk</td>
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<tr>
<td>Bethany Dertinger</td>
<td>Accountant</td>
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<tr>
<td>Christi Dickey</td>
<td>Associate Director, Financial Aid</td>
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<tr>
<td>Cynthia Doll</td>
<td>Interim College Registration Associate</td>
</tr>
<tr>
<td>Cindy Dukowitz</td>
<td>General Maintenance Worker Lead</td>
</tr>
<tr>
<td>David Dumbeck</td>
<td>Data Systems Architect</td>
</tr>
<tr>
<td>Sherry Dykhoff</td>
<td>Exam Monitor</td>
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<tr>
<td>Scott Esben</td>
<td>Director of Student Development Services</td>
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<tr>
<td>Patricia Ekren</td>
<td>Account Clerk Senior/Foundation Financial Specialist</td>
</tr>
<tr>
<td>Diane Ellwanger</td>
<td>Food Service Worker</td>
</tr>
<tr>
<td>Daniel Elstad</td>
<td>IT Help Desk</td>
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<tr>
<td>Carissa Engstrom</td>
<td>Enrollment Manager</td>
</tr>
<tr>
<td>Najib Farah</td>
<td>General Maintenance Worker</td>
</tr>
<tr>
<td>Allison Fast</td>
<td>Project Coordinator, Strategic Prevention Framework Partnership for Success</td>
</tr>
<tr>
<td>Mary Frendin</td>
<td>College Registration Associate</td>
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<tr>
<td>Karen Gabrielson</td>
<td>Account Clerk</td>
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<tr>
<td>Randy George</td>
<td>General Maintenance Worker</td>
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<tr>
<td>Marisa Gonzalez</td>
<td>College Social Worker</td>
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<tr>
<td>Marcia Goodyear</td>
<td>Administrative Assistant</td>
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<tr>
<td>Kim Gould</td>
<td>Campus Resource Specialist</td>
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<tr>
<td>Sally Gruver</td>
<td>Accounts Receivable Clerk</td>
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<tr>
<td>Judith Hacking</td>
<td>Library Technician</td>
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<tr>
<td>Darren Hage</td>
<td>IT Help Desk</td>
</tr>
<tr>
<td>Cheri Hagen</td>
<td>Library Technician</td>
</tr>
</tbody>
</table>
Lavonn Hanson..............................Campus Administrative Support
Lori Harper.............................................. Library Technician
Doreen Hauge ........................................ Library Technician
Jeffrey Haukos ....................Multimedia Information Technician
Cynthia Hayward ..................Central Financial Aid Loan Processor
Michael Heikkila ..................General Maintenance Worker
Lorie Heldt.............................................. Campus Resource Specialist
Emily Hendrickson......................... Health Educator
Marsha Hendrickson............................Exam Monitor
Alec Henry.............................................. Library Technician
Marlo Hieb ......................................... Bookstore Manager
Jacqueline Hoban .................................. Administrative Assistant
Amy Hochgraber ............................Industry Liaison, Workforce Development Solutions
Joel Hoffman...................................... Nursing Lab Assistant
Lacey Hoffmann .......................... Registration and Records Assistant
Alan Hughes .......................... General Maintenance Worker
Jordan (Cody) Hughes .......................... Spartan Center Tutor
Bruce Hurt .................................. Facilities Services Supervisor
Kimberly Imdieke ..................Enrollment and Outreach Specialist
Claryce Iverson .................................. Exam Monitor
Kenneth Iverson .................................. IT Help Desk
Pamela Jacob .................................. College Admissions Specialist
Jacqueline Jandt .......................... Financial Aid Assistant
Melissa Jaskowski .......................... Associate Director of Financial Aid
Casey Jensen.... Web Portal and Application Developer/Administrator
David Jensen .......................... Student Life and Recruitment Director
Michele Jensen .......................... Associate Registrar
Sheila Jesness ...................................... Administrative Assistant
Carol Johnson .................................. Exam Monitor
Kate Johnson .................................. Interim Steps to Success Recruiter and Academic Coach
Susan Johnson ..................General Maintenance Worker
Kyle Johnston ............Director of Strategic Communications and Marketing
Andrew Joy ..................Telecommunications and Wiring Specialist
Peg Kalar .................................. Communications Specialist
Sudhir (Sunny) Kamath .................. Academic Coordinator
Jeannie Kaspari ..................Dental Lab Assistant
Brenda Kava.................................. Associate Registrar
David Kenyon .......................... General Maintenance Worker
Linda Kidder .......................... Exam Monitor
Heidi King .................................. Food Service Coordinator
Marci King .................................. Library Technician
Christopher Klein ........ IT Help Desk
Joel Kotschevar .........Building and Grounds Supervisor
Jon Kragness ..................Director of Disability Services
Barbara LaPlante ..........................Assistant to Continuous Improvement Efforts (AQIP)
Lori Larson ..................Executive Director, Fergus Area College Foundation
Juliana Lindsey .......................... Call Center Resource Specialist
Eugenie Loeffler ..........................Exam Monitor
Christina Loreth .................................. Bookstore Coordinator
Jacqueline Lysdahl ..................College Registration Associate
Jacquelyn Maehnner .......................... Administrative Assistant, Fergus Area College Foundation
Joni Massie .................................. Academic Advisor
Rebecca Matinda .................................. Data Analyst / Interim Director Academic Bridge
Karen McKagan .................. Retail Services Assistant
Victoria McWane-Creek .......................... Interim Director of Housing
Brenda Mergens .................. Administrative Assistant
Ricky Mitchell .......................... General Maintenance Worker
Barbara Moquist .......................... Retail Services Director
Kitra Nelson ..........................Project Coordinator, Strategic Prevention Framework Partnership for Success
Kristin Nelson .................................. Academic Advisor
Mark Nelson .................................. Academic Advisor
Larissa Ness .................................. Interim Selective Admissions and Advising Specialist
Nathan Nims .............................................. IT Help Desk
Ricky Normandin ............................... General Repair Worker
Gene Nygaard .................................. General Maintenance Worker
Wendy Olds ......................................... Director of Financial Aid
Ann Olson ........................................... Foundation Administrative Assistant
Mary Olson ........................................ Advising and Outreach Specialist
Jesus Ortiz ......................................... General Maintenance Worker
Caroline Owens ................................... Exam Monitor
Hayley Oye ........................................... Bookstore Assistant
Rick Pedersen ...................................... General Repair Worker
Nicole Perala ...................................... Transfer Specialist
Mindy Puckett ................................. Central Accounts Receivable Clerk
Suzanne RetHEMEIER ......................... Academic Advisor
Patricia Robins .................................... General Maintenance Worker
Paula Rohr ........................................... Spartan Center Tutor
Margo Rolcynski ................................. Administrative Assistant
Cheryl Rudrud ..................................... Campus Resource Specialist
Leslie Rudrud .......................... Associate Director, Financial Aid / Grant Admin Asst.
Arthur Saylee ....................................... General Maintenance Worker
Jonathan Schaen .......................... Retail Services Assistant/Closer
Douglas Schmidt ......................... Electrical line Worker Lab Assistant
Logan Schmidt .................................... Enrollment Manager
Roger Schoon .................................... General Maintenance Worker
Johnathan Schuman ..................... Line Worker Lab Assistant
Gregory Schwoboda ..................... Systems Security Administrator
Kristina Seifert ......................... Academic Advisor/ Disability Coordinator/
                                      Student Life Director
Jessica Sem ............................................ Enrollment Manager
Heath Sershen .............................. Oracle/CRM and Application
                                      Developer/Administrator
Krista Shaikoski ............................. College Admissions Specialist;
                                      Call Center Resource Specialist
Puja Sharma-Husmann .......... Enrollment Manager
Angela Sielie ................................ Associate Registrar
Claudia Simon ................................. Disability and Learning Services Director
Kayla Simon ....................................... College Social Worker
Sandra Smith ................................. Human Resources Associate
Joann Smithwick ......................... Campus Crossing Assistant
Jenna Sobiech ................................. Accounts Receivable Coordinator
Michael Sobiech ................................ Infrastructure Specialist
Nancy South ................................... Director of Student Services
Jamie Steinle ................................. Nursing Lab Assistant
Karen Stenstrom ......................... Director of Health Training
Caitlin Stoecker ................................ Foundation Development Officer
Teresa Stolfus ................................. Director of Student Engagement
Diane Stroo ........................................... Account Clerk
Lori Stuhau ........................................ Dental Clinic Coordinator/Receptionist
Meloni Swenson ................................ General Maintenance Worker
Travis Swenson ................................ Dental Assistant
Brenda Tangen ................................... Human Resources Associate
Teresa Thompson ......................... Payroll Coordinator
Sandra Torgusson ......................... Enrollment Manager
Carol Totland ................................... Assistant to the President
Brechtanna Tracy ................................ Administrative Assistant
Anna Trautmann ......................... Food Service Worker
Leah Trontvet ................................... Interim Academic Advisor
Katie Tysdal ................................... Assistant to the Associate
                                      Vice President of Academic Affairs
David Uselman ................................ Nursing Lab Assistant
Susan Vickstrom ......................... Campus Resource Specialist
Justin Wade ................................ Web and Application Developer
Kristy Wagar ................................... Account Clerk Senior
Erin Warren ......................... Dual Credit Academic Advisor/K12 Success Coach
Melanie Waye .................................... Retail Services Assistant
Yvonne Wegscheid ..................... General Maintenance Worker
Christopher Welle.............................. Director of Web Services
Kay Wilder.............................................. Fitness Center Manager
Wayne Wolden........................................ Business Manager
Michelle Wosika.......................... Associate Director, Financial Aid
Lisa Ziegler ............................................ Help Desk Director
Sue Zurn................................................... Career Services Director
Directions to Campuses

Detroit Lakes Campus
900 Highway 34 East

From the East on US Highway 10
At the first stoplight as you enter Detroit Lakes, turn right onto Kris Street. Cross over the railroad track and turn left onto Randolph Road. Travel approximately 1 mile to the stop sign on Roosevelt Avenue. Turn right and travel approximately a half mile to the stop light; turn right on State Highway 34. The campus is ahead on your left.

From the East on US Highway 34
Entering the city, the campus is on your right (across from the Cenex Station). From the West on US Highway 10 East Continue on Highway 10 to the stop light at the intersection of US Highways 10 and 59. Turn left and continue for approximately two blocks. Turn right onto State Highway 34. The campus is about 1 mile ahead on your left.

From the South on US Highway 59
Travel on Highway 59 to the stop light at the intersection of US Highways 59 and 10. Continue straight, passing over the bridge. Turn right onto State Highway 34; the campus is about 1 mile ahead on your left.

From the North on US Highway 59
Travel on Highway 59 to the intersection of US Highway 59 and State Highway 34. Turn left onto Highway 34; the campus is about 1 mile ahead on your left.

Fergus Falls Campus
1414 College Way

From the East on Interstate 94
Take Exit 54 and turn right onto Lincoln Avenue. Turn left onto College Way, and the campus is on your right.

From the West on Interstate 94
Take Exit 54 and turn left onto Lincoln Avenue. Turn left onto College Way, and the campus is on your right.

From the East on State Highway 210 West
Turn right onto Pebble Lake Road/Vernon Avenue and continue to Union Avenue. At the stop sign, turn right onto Vernon Avenue and then left onto Lincoln Avenue at the downtown intersection. Turn right onto College Way, and the campus is on your right.

From the North on State Highway 59
At the junction with Interstate 94, turn left onto County Road 88/Fir Avenue and continue to Tower Road. Turn right onto Tower Road and continue to Spartan Drive. Turn left at the north entrance to the campus.
Moorhead Campus
1900 28th Avenue South

From the West on Interstate 94
Take Exit 1B (20th Street) and turn left onto 20th Street. Cross over the interstate, and you will see the college on your left. Turn left at 28th Avenue South.

From the East on Interstate 94
Take Exit 1A and turn right onto Highway 75. Immediately after your turn, take another right at the Minnesota State Community and Technical College directional sign and follow the frontage road (28th Avenue) to the campus, which will be on your left.

From the East on Highway 10
Turn left at the 21st Street intersection, one stoplight beyond Highway 75 North. Follow 21st Street beneath the railroad bridge; the street angles to the right, but continue straight onto 20th Street South. Continue for approximately two miles to 28th Avenue South. The campus will be on your left.

North Moorhead Campus
1110 14th Street South

From the main campus, travel west on either 24th or 28th avenues (the main streets on the north or south sides of the campus). Turn right onto 14th Street South and continue to 12th Avenue South, where the campus is located.

Wadena Campus
405 Colfax Ave SW

From the North on US Highway 71
At Colfax Avenue/State Highway 29, turn right and continue on Colfax Avenue for five blocks.

From the South on US Highway 71
At Colfax Avenue/State Highway 29, turn left and continue on Colfax Avenue for five blocks. The campus is on your left.

From the East on US Highway 10 West
Turn left onto State Highway 71 and continue to Colfax Avenue/US Highway 29. Turn right onto Colfax Avenue and continue for five blocks. The campus is on your left.

From the West on US Highway 10 East
Turn right onto Highway 71 and continue to Colfax Avenue/Highway 29. Turn right onto Colfax Avenue and continue for five blocks. The campus is on your left.

From the South/West on State Highway 29
The campus will be on your right shortly after entering the city limits.