2017-2018

COLLEGE CATALOG

Minnesota State
Community and Technical College

MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE

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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 the:

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!

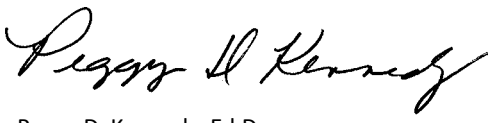
Minnesota State Community and Technical College has campuses in Detroit Lakes, Fergus Falls, Moorhead and Wadena, and an online program that offers numerous opportunities to *discover your future*. Whether you are interested in career and technical training, academic transfer education, advancing in 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

Directory of College Services

Detroit Lakes

Academic and Student Services

Academic Dean 218.846.3723

Campus Director of Student Services 218.846.3714

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 218.846.3670

Assessments/Accuplacer 218.846.3777

Bookstore 218.846.3727

Child Care 218.847.1145

Computer Help Center 218.846.3764

Disability Services 218.846.3734

English Language Learner 218.846.3734

Enrollment 218.846.3777

Facilities 218.631.7906

Financial Aid 218.846.3754

Food Service 218.847.2309

Foundation 218.846.3720

Housing 218.846.3670

Information 218.846.3670

Library 218.846.3772

Student Life 218.846.3768

Social Worker, Resources and Referrals 218.846.3687

Spartan Center/Tutoring 218.846.3734

Student Records 218.846.3789

Veterans Services 218.299.6881

Fergus Falls

Academic and Student Services

Academic Dean 218.736.1507

Campus Director of Student Services 218.736.1530

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 218.736.1533

Assessments/Accuplacer 218.736.1529

Athletics 218.736.1648

Bookstore 218-736.1556

Box Office/Fine Arts 218.736.1600

Computer Help Center 218.736.1655

Counseling 218.736.1539

Disability Services 218.736.1595

Enrollment 218.736.1549

Facilities 218.736.1560

Financial Aid 218.736.1534

Food Service 218.736.1760

Foundation 218.736.1514

Housing 218.736.1635

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

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

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

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

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, Mission and Values

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.

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

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.

Detroit Lakes

900 Highway 34 East
Detroit Lakes, MN 56501-2698
218.846.3700 • 877.450.3322
Fax: 218.846.3794

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.

Fergus Falls

1414 College Way
Fergus Falls, MN 56537-1000
218.736.1500 • 877.450.3322
Fax: 218.736.1510

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 ealth 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 chorale 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.

Moorhead

1900 28th Avenue South
Moorhead, MN 56560-4899
218.299.6500 • 877.450.3322
Fax: 218.299.6810

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 agri-business, 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.

Wadena

405 SW Colfax Avenue
Wadena, MN 56482-1447
218.631.7800 • 877.450.3322
Fax: 218.631.7904

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

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	**21**	22	**23**	24	**25**	26
27	28	29	30	31		

September 2017

S	M	T	W	T	F	S
					1	2
3	**4**	5	6	7	8	9
10	11	12	13	14	**15**	16
17	18	19	20	21	22	23
24	25	**26**	27	28	29	30

October 2017

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	**16**	17	18	**19**	**20**	21
22	23	24	25	26	27	28
29	30	31				

November 2017

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	**10**	11
12	13	14	15	16	17	18
19	20	21	**22**	**23**	**24**	25
26	27	28	29	30		

December 2017

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	**11**	**12**	**13**	**14**	**15**	16
17	**18**	**19**	**20**	**21**	**22**	23
24/31	**25**	**26**	**27**	**28**	**29**	30

January 2018

S	M	T	W	T	F	S
	1	**2**	**3**	**4**	**5**	6
7	**8**	9	**10**	11	**12**	13
14	**15**	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

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: Summer term general education/online courses begin

JULY 2018

July 4: Independence Day ***COLLEGE CLOSED***
July 27: Summer term ends

February 2018

S	M	T	W	T	F	S
				1	**2**	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	**19**	**20**	21	22	23	24
25	26	27	28			

March 2018

S	M	T	W	T	F	S
				1	2	3
4	**5**	6	7	8	**9**	10
11	**12**	**13**	**14**	**15**	**16**	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April 2018

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	**11**	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May 2018

S	M	T	W	T	F	S
		1	**2**	**3**	**4**	5
6	7	**8**	**9**	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	**28**	29	30	31		

June 2018

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July 2018

S	M	T	W	T	F	S
1	2	3	**4**	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	**27**	28
29	30	31				

Visit minnesota.edu/calendar for more information.

Minnesota State Community and Technical College

Snapshot Profile

Baudette

Moorhead

Detroit Lakes

Wadena

Fergus Falls

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.

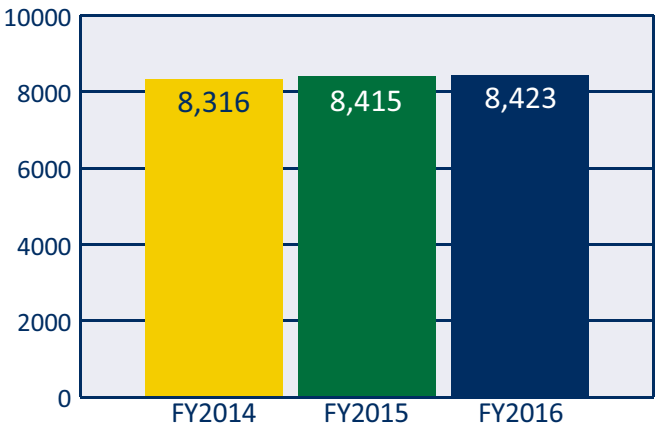
M State was created July 1, 2003, by the merger of Fergus Falls Community College and three campuses of Northwest Technical College. This new college was developed to better serve the needs of the communities in west central Minnesota and the Red River Valley through a combination of strong technical 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.

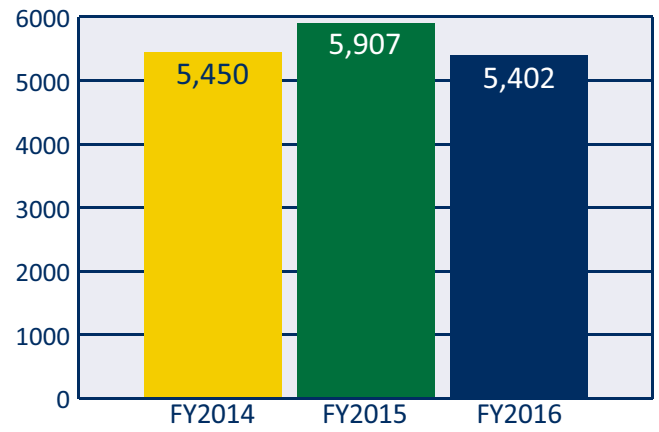
Healthy Enrollment

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.

M State Headcount



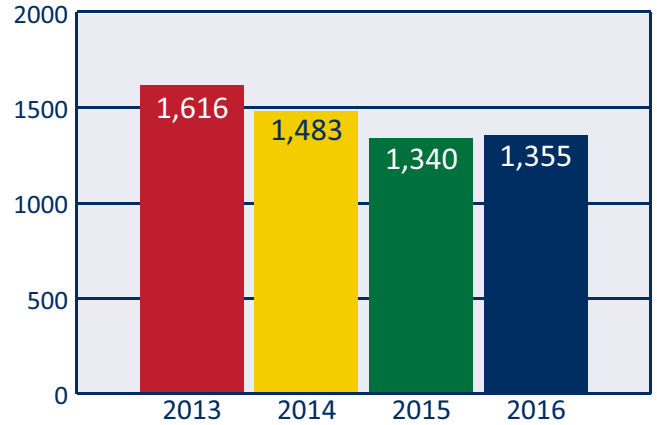
Workforce Development Solutions Headcount



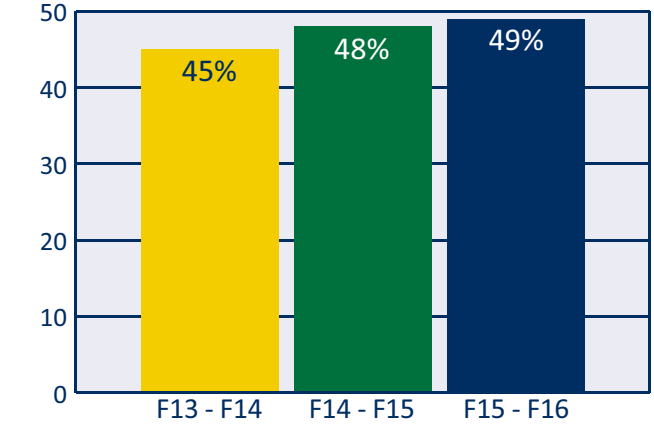
Success of Graduates

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 to 1,355** from 2015's graduating class of 1,340. Forty-eight percent of M State students either graduated from the college or transferred to continue their education at another institution within three years of their start in the fall of 2013.

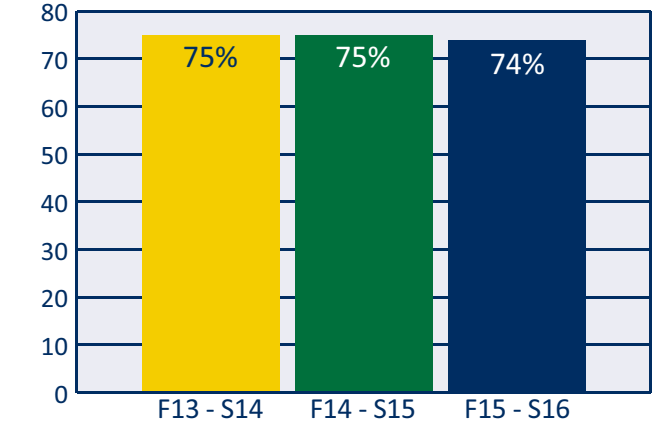
M State Graduates



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



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



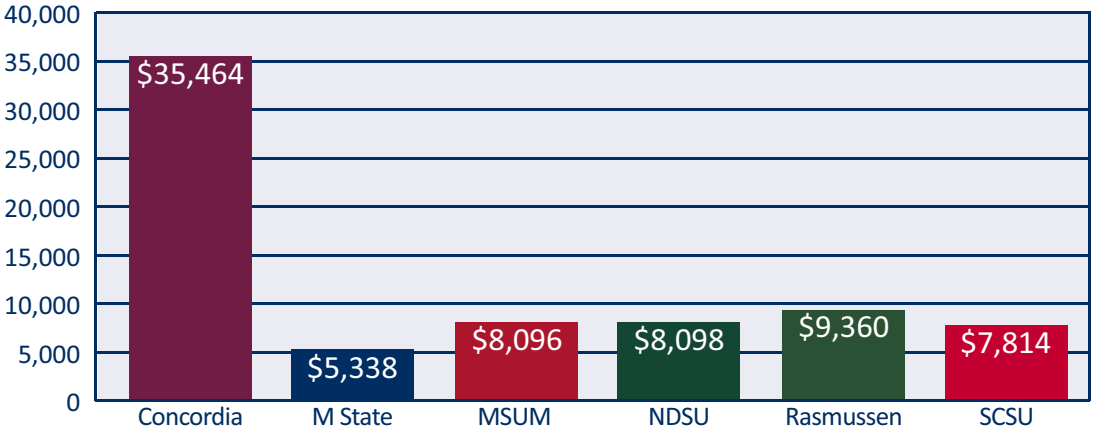
Serving a Diverse Student Population

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.

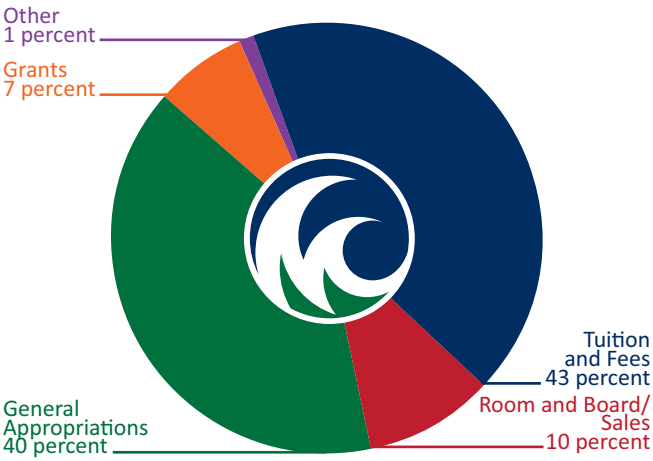
2016-2017 In-State Tuition and Fees Comparison



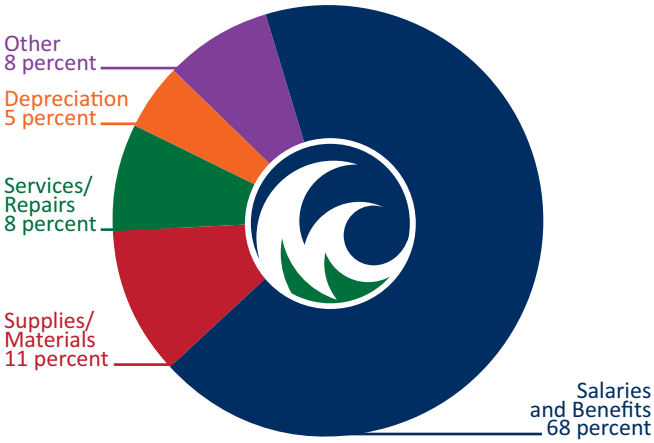
The Tuition and Fees Comparison chart compares tuition rates for full-time students who are state residents.

Source: College Navigator (National Center for Education Statistics)

FY 2016 Revenues



FY 2016 Expenditures



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

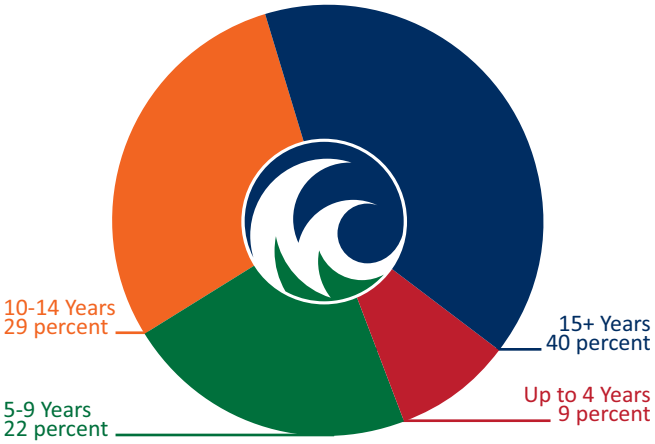
M State currently manages two federal grants totaling more than $4.7 million. Over the next three years, the U.S. Department of Labor TAACCCT Grant will continue to support the ongoing training of more than 400 west central Minnesota residents for careers in construction and utilities. The U.S. Department 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.

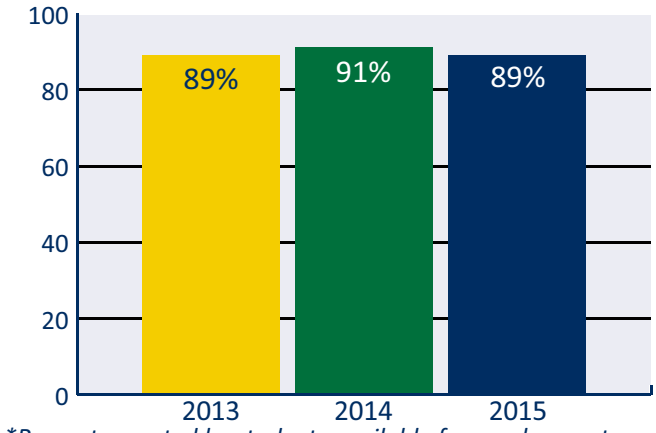
Focus on Workforce Development and Industry Partnerships

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.

FY 2016 Full-Time Faculty Tenure



Percent of Graduates Employed in Related Field*



**Percent reported by students available for employment*

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.

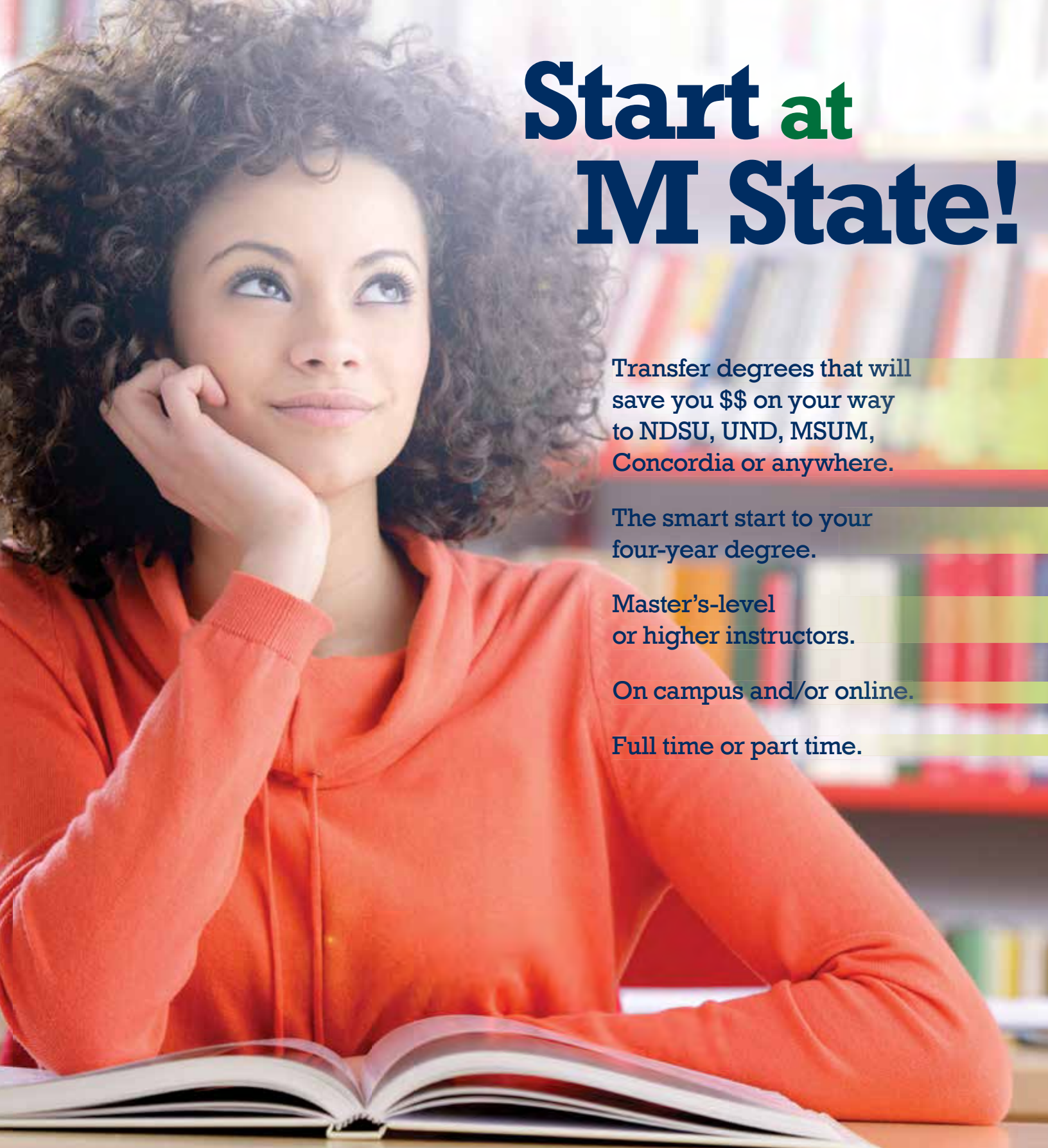
Student Life

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**.

LEARN MORE
minnesota.edu
877.450.3322
info@minnesota.edu
minnesota.edu/help

Minnesota State
Community and Technical College
A member of the Minnesota State system

Minnesota State Community and Technical College is an Affirmative Action/Equal Opportunity College. This document is available in alternative format to individuals with disabilities by calling Disability Services at 218.299.6506 or the Office of Diversity and Inclusion at 218.299.6506.



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.

17:1 STUDENT TO FACULTY RATIO

$207 thousand $$$ IN SCHOLARSHIPS AWARDED EACH YEAR

80% of M STATE students receive FINANCIAL AID

NJCAA Our athletes compete in Division III athletics

Minnesota State Community and Technical College
A member of the Minnesota State system

LEARN MORE at minnesota.edu

MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE

Workforce Development Solutions

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 Resuce

- Confined Space Rescue
- Hazardous Materials
- Live Fire Training
- National Fire Academy Courses
- NFPA 1001 Firefighter I an 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

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 Ed 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)
1333 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.naacls.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 Accreditiation Review Council on Education in Surgical Technology and Surgical Assisting
Commission on Accreditation of Allied Health Ecuation Programs
25400 US Hwy 19 N., Suite 158
Clearwater, FL 33763
727.210.2350
www.caahep.org

General Information

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 oneline 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 coordinators, 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 Recency 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:

- To inspect and review their educational records.
- 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.
- To have a hearing regarding records which the student believe are inaccurate or misleading, if the college does not amend records upon request.
- 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.
- 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.
- 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. Written complaints should be sent to: Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue, S.W. Washington, DC 20202-4605.
- To obtain a copy of the college's complete policy regarding education records. The college has policy information available in the College Catalog and on the college website at minnesota.edu/policies.

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, volunteers 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:

- Public Data – Data that has been designated as directory data is considered public. The Student Directory Data policy defines directory data for M State.
- 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.
- 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:

- Name not being listed in commencement publications
- Denial of all student directory information being released to third parties
- 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-

dustry, 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
- Library services
- Multicultural programming and services
- Services for students with disabilities
- Writing assistance

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 alterative 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.

The college reserves the right to administratively withdraw or drop a student for non-attendance in special circumstances.

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:

Minnesota Transfer Curriculum Goal Areas:

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

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

Other Designations:

AU Audit of a class for no credit. The AU designation does not impact grade point average or satisfactor 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.

Cumulative Registered Credits	Minimum Required GPA
0 – 5	0.00
6 – 23	1.75
24 or more	2.00

Quantitative Measure

Completion Percentage: All students are required to earn a minimum of their cumulative registered/attempted 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:
Percent earned
=

[cumulative earned credits/
cumulative registered credits X 100]

Cumulative Registered Credits	Minimum Required Completion
0 – 5	0 percent
6 – 23	58 percent
24 or more	66.6 percent

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've met 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 an "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

but is counted as attempted credits, therefore negatively impacts the student's percentage of completion.

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

remarks, taunting, badgering, or verbal intimidation toward or about other students in the classroom, other groups of people, or the instructor.

- Intoxication or other suspected substance impairments.
- Harassment (e.g. use of "fighting words", stalking)
- Making physical threats to a classmate or the instructor.
- Threat to harm oneself or others.
- Physical violence (e.g. shoving, grabbing, assault, use of weapons)
- Communication that may directly or indirectly affect teaching and learning including phone calls, emails, or other correspondence prior to, during, or after a semester of a course enrollment that creates reasonable fear for a faculty member or fellow classmates.

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.

Students in violation of this academic policy may also be in violation of the Student Conduct Code and may be subject to concurrent and or separate sanctions pending the offense.

Definitions

Class/Classroom - a physical classroom, lab, instructional field space, offsite 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 permitted 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 either 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.

Parking/Common Area Fee

Parking 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 requires 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

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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 activity.

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 Breczinski, 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 or 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 extra-curricular 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, Wadena
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 activites 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) and/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.

M State Program	M State Degree	Transfer Program	Transfer Degree	Institution
Accounting	AS	Accounting	BS	Minnesota State University, Moorhead
Accounting	AAS	Accounting	BS	University of Minnesota, Crookston
Architectural Drafting and Design	AAS	Construction Management	BS	Minnesota State University, Moorhead
Architectural Drafting and Design	AAS	Operations Management	BS	Minnesota State University, Moorhead
Automotive Service Technology	AAS			
Carpentry	AAS			
Civil Engineering Technology	AAS			
Construction Management	AAS			
Diesel Equipment Technology	AAS			
Drafting and 3D Technologies	AAS			
Electrical Lineworker Technology	AAS			
Graphic Design Technology	AAS			
Health Information Technology/Coding	AAS			
Information Technology	AAS			
Marine Engine Technology	AAS			
Automotive Service Technology	Diploma	Operations Management	BS	Minnesota State University, Moorhead
Electrical Technology	Diploma			
Electrical Technology-Industrial Maintenance Emphasis	Diploma			
Diesel Equipment Technology	Diploma			
Drafting and 3D Technologies	Diploma			
Electrical Lineworker Technology	Diploma			
HVAC/R	Diploma			
Information Technology	Diploma			
Marine Engine Technology	Diploma			
PowerSports Technology	Diploma			
Refrigeration and Air Conditioning	Diploma			
Web Development	Diploma			
Biological Sciences	AS	Biology	BA	Bemidji State University
Biological Sciences	AS	Biology	BS	Bemidji State University
Biological Sciences	AS	Biology	BA	Minnesota State University, Moorhead
Biological Sciences	AS	Biology Emphasis in Ecology and Evolutionary Biology	BA	Minnesota State University, Moorhead
Business	AS	Business Administration	BS	Minnesota State University, Moorhead
Business	AS	Project Management	BS	Minnesota State University, Moorhead
Business	AS	Business Management	BS	University of Minnesota, Crookston
Business Administration	AS	Business Administration	BAS	Mayville State University
Business Administration	AAS	Business Administration	BAS	Mayville State University
Business Administration	AAS	Project Management	BS	Minnesota State University, Moorhead
Business Entrepreneurship	AAS	Project Management	BS	Minnesota State University, Moorhead

Business: Management, Marketing and Sales	AAS	Project Management	BS	Minnesota State University, Moorhead
Business: Management, Marketing and Sales	AAS	Business Management	BS	University of Minnesota, Crookston
Chemistry	AS	Chemistry	BS	Minnesota State University, Moorhead
Chemistry	AS	Chemistry	BA	Minnesota State University, Moorhead
Civil Engineering Technology	AAS	Construction Management	BS	Minnesota State University, Moorhead
Computer Programming Information Technology Network Administration and Security	AAS AAS AAS	Operations Management	BS	Minnesota State University, Moorhead
Computer Programming	AAS	Project Management	BS	Minnesota State University, Moorhead
Construction Management	AAS	Construction Management	BS	Minnesota State University Moorhead
Dental Hygiene	AAS	Dental Hygiene	BSDH	Metropolitan State University
Diesel Equipment Technology	AAS	Manufacturing Management	BMM	University of Minnesota, Crookston
Engineering	AS	Project Management	BS	Minnesota State University, Moorhead
Environmental Science	AS	Environmental Studies	BS	Bemidji State University
Environmental Science	AS	Project Management	BS	Minnesota State University, Moorhead
Environmental Science	AS	Environmental Science (Agricultural Environmental Stewardship Emphasis)	BS	University of Minnesota, Crookston
Environmental Science	AS	Environmental Science (Environmental Ecology Emphasis)	BS	University of Minnesota, Crookston
Environmental Science	AS	Environmental Science (Environmental Health Emphasis)	BS	University of Minnesota, Crookston
Environmental Science	AS	Environmental Science (Environmental Toxicology and Chemistry Emphasis)	BS	University of Minnesota, Crookston
Environmental Science	AS	Environmental Science (Water Quality Emphasis)	BS	University of Minnesota, Crookston
Graphic Design Technology	AAS	Project Management	BS	Minnesota State University, Moorhead
Health Information Technology/Coding	AAS	Health Information Management	BS	College of St. Scholastica
Human Resources	AAS	Project Management	BS	Minnesota State University, Moorhead
Human Resources	AS	Project Management	BS	Minnesota State University, Moorhead
Information Technology	AS	Computer Information Technology	BS	Minnesota State University, Moorhead
Information Technology	AS	Operations Management	BS	Minnesota State University, Moorhead
Information Technology	AS	Project Management	BS	Minnesota State University, Moorhead
Liberal Arts and Sciences	AA	Social Work	BSW	Minnesota State University, Moorhead
Management Info Systems	AS	Project Management	BS	Minnesota State University, Moorhead
Music	AFA	Music	BA	Southwest Minnesota State University
Nursing		Nursing		MnSCU Statewide
Network Administration & Security	AAS	Project Management	BS	Minnesota State University, Moorhead
Network Administration & Security	AAS	Operations Management	BS	Minnesota State University, Moorhead
Paralegal	AAS	Paralegal	BS	Minnesota State University, Moorhead
Theatre Arts	AFA	Theatre Arts	BA	Minnesota State University, Moorhead

*Pending MnSCU approval

Programs and Majors

Learn more at minnesota.edu

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Human Services 88

Minnesota State
Community and Technical College

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	Detroit Lakes	Fergus Falls	Moorhead	Wadena	Online	Other*	AA	AFA	AAS	AS	Certificate	Diploma
	University Transfer												
52	Associate of Arts (AA) / University Transfer	●	●	●	●	●		●					
52	General Education	●	●	●	●	●		●					
55	Individualized Studies	●	●	●	●	●				●			
55	Liberal Arts and Sciences	●	●	●	●	●		●					
55	Psychology Transfer Pathway			●		●		●					
55	Social Science - Social Work	●	●	●		●		●					
55	Social Science - Sociology	●	●	●		●		●					
	Agriculture, Food and Natural Resources												
54	Environmental Science		●	●							●		
54	Equine Science		●							●			●
54	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.

	PROGRAM/MAJOR	Detroit Lakes	Fergus Falls	Moorhead	Wadena	Online	Other*	AA	AFA	AAS	AS	Certificate	Diploma
	Arts, Communication and Computer/Information Systems												
64	American Sign Language			●								●	
64	Cisco Networking	●				●	●					●	
64	Computer Programming			●		●				●			
64	Graphic Design Technology			●						●		●	
65	Information Technology	●		●		●				●	●		
65	Information Technology - Database Administration			●		●				●			
65	Music		●						●				
66	Network Administration and Security			●			●			●			
66	Network Security			●		●	●					●	
67	Sign Language Interpreter Preparation			●						●			
67	Theatre Arts		●						●				
68	Visual Art		●						●				
68	Web Design					●						●	
	Business, Administration and Management												
72	Accounting	●	●	●		●				●	●		●
73	Accounting Clerk Diploma	●		●		●							●
73	Administrative Support			●									●
73	Administrative Office Assistant			●						●			
75	Business		●	●		●					●		
75	Business Administration		●							●		●	
75	Business and Banking		●							●			
76	Business Entrepreneurship	●				●	●			●		●	●
76	Business: Management, Marketing and Sales	●		●		●				●			●
76	Business: Marketing and Sales	●		●		●							
77	Entrepreneur Essentials	●				●						●	
77	Entrepreneur Fundamentals	●				●						●	
77	Entrepreneur	●				●						●	
77	Human Resources			●		●				●	●		
77	Payroll Specialist	●		●		●							●
78	Professional Sales Skills	●		●		●						●	
78	Supervisory Leadership Essentials	●	●	●	●							●	
	Engineering, Manufacturing and Technology												
82	Architectural Drafting and Design	●								●			●
82	Automotive Service Technology			●						●			●
83	Civil Engineering Technology	●								●			●
83	Commercial Refrigeration			●									●
83	Construction Management			●						●			
83	Diesel Equipment Technology			●						●			●
84	Drafting and 3D Technologies			●						●			●
85	Electrical Line Worker (also in Baudette)				●		●			●			●
85	Electrical Technology			●	●								●
86	Engineering			●							●		
86	Gas Utility Construction and Service				●								●
86	Heating Ventilation Air Conditioning and Refrigeration			●	●								●

	PROGRAM/MAJOR	Detroit Lakes	Fergus Falls	Moorhead	Wadena	Online	Other*	AA	AFA	AAS	AS	Certificate	Diploma
87	Industrial Workplace Readiness			●								●	
87	Marine Engine Technology	●					●			●		●	●
88	Plumbing Technology			●			●						●
88	PowerSports Technology	●					●					●	●
88	Survey Technician	●											●
	Health Science Technology												
92	Biological Sciences		●	●							●		
92	Chemistry		●	●							●		
93	Dental Assisting			●						●			●
93	Dental Hygiene			●						●			
93	Dialysis Technician			●								●	
93	Health Information Technology/Coding					●				●			
94	Medical Administrative Assistant			●		●				●			
94	Medical Coding And Insurance			●		●							●
94	Medical Laboratory Technology		●								●		
95	Medical Office Assistant			●		●							●
95	Medical Receptionist			●		●							●
95	Medical Transcription			●		●							●
95	Mental Health Behavioral Aide II					●						●	
95	Nursing	●	●	●	●		●				●		●
96	Pharmacy Technology					●	●			●			●
97	Phlebotomy Technician		●									●	
97	Radiologic Technology	●				●				●			
97	Surgical Technology			●						●			
	Human Services												
100	Child Care and Education	●		●								●	
100	Cosmetology				●							●	●
100	Correctional Officer			●								●	
100	Criminal Justice			●							●		
101	Early Childhood and Paraprofessional Education	●									●		
101	Esthetist				●							●	
101	Fire Service Preparation			●								●	
101	Manicurist				●								●
101	Massage Therapy				●		●						●
102	Paralegal	●				●				●			

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

University Transfer

Learn more at minnesota.edu

Minnesota State Community and Technical College reserves the right to change without notice any of the materials (information, requirements, regulations) published in this document. This publication is not a contract.

Biological Sciences AS.....92
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 Serivces

Engineering AS 86
See Engineering, Manufacturing and Technology

Environmental Science AS 60
See Agriture, Foods and Natural Resources

Human Resources AS.....77
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Liberal Arts and Sciences AA 52-55

Liberal Arts and Sciences - Social Work Emphasis AA 55

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Music AFA..... 65-66
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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

Minnesota State
Community and Technical College

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

Complete a minimum of nine credits as prescribed below

COMM	1100	Communication and Effective Human Relations1,2	
COMM	1120	Introduction to Public Speaking	1
COMM	1130	Small Group Communication	1,2
COMM	1140	Interpersonal Communication	1,2
ENGL	1215	Professional and Technical Writing	1
ENGL	2321	Women in Literature	1,2,6,7

AREA 2: Critical Thinking

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

ART	1123	Global Art History: Asian, Islamic, African, Mesoamerican	2,6
BIOL	1104	Biology of Human Concerns	2,3
BIOL	1107	Environmental Science Issues	2,3,10
BIOL	1108	Environmental Science Issues Lab	2,3,10
CHEM	1111	General Inorganic Chemistry I	2,3
CHEM	1112	General Inorganic Chemistry II	2,3
CHEM	1115	Introduction to Organic and Biochemistry	2,3
CHEM	2224	Organic Chemistry I	2,3
CHEM	2225	Organic Chemistry II	2,3
COMM	1100	Communication and Effective Human Relations	1,2
COMM	1130	Small Group Communication	1,2
COMM	1140	Interpersonal Communication	1,2
CSCI	1110	Informatics	2,9
ECON	1150	Essentials of Economics	2,5
ECON	2210	Macroeconomics	2,5
ECON	2222	Microeconomics	2,5,9
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	2304	Introduction to Literature, Native American Focus	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	2372	Children's Literature	2,6,7
ENGL	2374	The Poetics of Rock Lyrics	2,6
HONS	1101	Introduction to Honors	2
HONS	2900	Honors Capstone Seminar	2
HUM	1110	Native American Culture	2,6,7
HUM	2210	Introduction to Film	2,6
HUM	2236	Technology in the Humanities	2,6,8
HUM	2301	Heroes, Moral and Cultural	2,6
ILS	1100	Integrative Learning Seminar I	2
ILS	2100	Integrative Learning Seminar II	2
MATH	1102	Finite Math	2,4
MATH	1114	College Algebra	2,4
MATH	1115	Functions/Trigonometry	2,4
MATH	1116	College Trigonometry	2,4
MATH	1118	Precalculus	2,4
MATH	1122	Applied Calculus and Linear Algebra	2,4
MATH	1134	Calculus I	2,4
MATH	1135	Calculus II	2,4
MATH	1207	Elementary Statistics	2,4
MATH	1213	Introduction to Statistics	2,4
MATH	2200	Principles of Arithmetic	2,4
MATH	2231	Calculus III	2,4
MATH	2257	Linear Algebra	2,4
MUSC	1121	Basic Theory and Musicianship I	2,6
MUSC	1122	Basic Theory and Musicianship II	2,6
MUSC	2231	Advanced Theory and Musicianship III	2,6
MUSC	2232	Advanced Theory and Musicianship IV	2,6
PHIL	1130	Critical Thinking	2
PHIL	1200	Applied and Professional Ethics	2,9
PHIL	1201	Ethics	2,6,9
PHIL	2224	Philosophy of Religion	2,6,8
PHIL	2225	Bioethics	2,9
PHIL	2230	Existentialism	2,6
PSYC	1101	Human Interaction	2,5
PSYC	2226	Behavior and Environmental Management	2,5,10
SOC	1111	Introduction to Sociology	2,5,7
SOC	2215	Criminology	2,5

AREA 3: Natural Sciences

*Complete a minimum of six credits; at least one course must include a lab (* denotes lab courses)*

BIOL	1102	Introduction to Horticulture	3
BIOL	1104	Biology of Human Concerns	2,3
BIOL	1107	Environmental Science Issues	2,3,10
BIOL	1108	Environmental Science Issues Lab	2,3,10
BIOL	1115	Introduction to Biotechnology	3
BIOL	1152	Food Science	3
BIOL	1161	Introduction to Freshwater Biology	3,10
BIOL	2265	Diagnostic Microbiology	3
CHEM	1111	General Inorganic Chemistry I	2,3
CHEM	1112	General Inorganic Chemistry II	2,3
CHEM	1115	Introduction to Organic and Biochemistry	2,3
CHEM	2224	Organic Chemistry I	2,3
CHEM	2225	Organic Chemistry II	2,3
GLST	1510	Global Studies: Natural Science	3,8
PHYS	1106	Fund of Physics - Mechanics	3
PHYS	1411	University Physics I	3
PHYS	1412	University Physics II	3

AREA 4: Mathematics/Logical Reasoning

Complete a minimum of three credits

MATH	1102	Finite Math	2,4
MATH	1114	College Algebra	2,4
MATH	1115	Functions/Trigonometry	2,4
MATH	1116	College Trigonometry	2,4
MATH	1118	Precalculus	2,4
MATH	1122	Applied Calculus and Linear Algebra	2,4
MATH	1134	Calculus I	2,4
MATH	1135	Calculus II	2,4
MATH	1207	Elementary Statistics	2,4
MATH	1213	Introduction to Statistics	2,4
MATH	2200	Principles of Arithmetic	2,4
MATH	2231	Calculus III	2,4
MATH	2257	Linear Algebra	2,4
PHIL	2235	Symbolic Logic	4

AREA 5: History and the Social and Behavioral Sciences

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

ANTH	1100	Introduction to Anthropology	5,8
ECON	1150	Essentials of Economics	2,5
ECON	2210	Macroeconomics	2,5
ECON	2222	Microeconomics	2,5,9
GEOG	1110	World Geography	5,8
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	1500	European Experience	5,8
HIST	1600	History of Baseball	5
HIST	2211	American History: the Colonial Period	5,8
HIST	2212	American History 19th Century	5,7
HIST	2213	American History: 20th Century	5,7
MCOM	1122	Introduction to Mass Communication	5,9
PHIL	2300	Political and Social Philosophy	5,7
PSYC	1101	Human Interaction	2,5
PSYC	1500	Positive Psychology	5,9
PSYC	2226	Behavior and Environmental Management	2,5,10
SOC	1111	Introduction to Sociology	2,5,7
SOC	1113	Social Problems	5,9
SOC	1114	Sociology Service Learning	5
SOC	2210	Social Deviance	5,7
SOC	2213	Sociology of the Family	5,7
SOC	2215	Criminology	2,5
SOC	2216	Minority Group Relations	5,7
SOC	2217	Rural Sociology	5,7
SOC	2220	Food, Culture and Society	5,7
SOC	2222	Sociology of Agriculture	5
WMST	1130	Introduction to Women's Studies	5,7

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 (^ denotes Fine Arts courses)

ART	1121	World of Art I	6,8
ART	1122	World of Art II	6,8
ART	1123	Global Art History: Asian, Islamic, African, Mesoamerican	2,6
ART	1124	American Art	6,7
ART	1141	Ceramics I	6
ART	2241	Advanced Ceramics	6
ART	2260	Art, Portfolio Design and Professional Development	6
COMM	2220	Oral Interpretation	6
ENGL	2200	Introduction to Creative Writing	6
ENGL	2221	Creative Writing: Poetry	6
ENGL	2222	Creative Writing: Fiction	6

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	2302	American 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	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	2372	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	1162	Jazz Ensemble	6
MUSC	1164	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	2372	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	2,5,7
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	1500	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
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
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	2237	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

BIOL	1107	Environmental Science Issues	2,3,10
BIOL	1108	Environmental Science Issues Lab	2,3,10
BIOL	1161	Introduction to Freshwater Biology	3,10
ENGL	2230	Environmental Literature	2,6,10
ENGL	2239	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	2226	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.

ENGL 1101 (3 cr) _____ _____

ENGL 1205, 1210 or 1215 (3 cr) _____ _____

COMM 1120, 1130 or 1140 (3 cr) _____ _____

Area 2: Critical Thinking (select 6 credits from 2 disciplines)

_____ _____

_____ _____

_____ _____

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

_____ _____

_____ _____

_____ _____

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

_____ _____

_____ _____

_____ _____

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

_____ _____

_____ _____

_____ _____

_____ _____

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.)

_____ _____

_____ _____

_____ _____

_____ _____

Subtotal _____

Area 7: Human Diversity (3 credits)

_____ _____

Area 8: Global Perspective (3 credits)

_____ _____

Area 9: Ethical and Civic Responsibility (3 credits)

_____ _____

Area 10: People and the Environment (3 credits)

_____ _____

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

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Elective Credits _____

General Education Credits _____

Total Credits (60 required) _____

Notes

_____

_____

_____

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_____

Associate of Arts Degree: Social Science Emphasis

Associate of Arts (AA) - 60 credits
D F M 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)

Course #	Course Title	Crds
	General Education w/MnTC Goals	9
	Communication	3
	Natural Sciences	3
	Mathematics/Logical Reasoning	3
	The Humanities and Fine Arts	9
	Global Perspective	3
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
BIOL1104	Biology of Human Concerns	3
COMM1120	Introduction to Public Speaking	3
ECON1150	Essentials of Economics	3
ENGL1101	College Writing	3
POLS1120	American National Government	3
PSYC1200	General Psychology	3
PSYC2222	Lifespan Development	3
SOC1111	Introduction to Sociology	3
SW2250	Introduction to Social Work/Social Welfare	3

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

Course #	Course Title	Crds
	General Education w/MnTC Goals	15
	Communication	3
	Natural Sciences	3
	Mathematics/Logical Reasoning	3
	The Humanities and Fine Arts	9
	Global Perspective	3
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
BIOL1104	Biology of Human Concerns	3
COMM1120	Introduction to Public Speaking	3
ECON1150	Essentials of Economics	3
ENGL1101	College Writing	3
POLS1120	American National Government	3
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3

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 the 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).

Course #	Course Title	Crds
	General Education w/MnTC Goals	9
	Career	42
3 credits from the following:		
COMM1100	Power and Communications in Human Relations	3
COMM1120	Introduction to Public Speaking	3
COMM1140	Interpersonal Communication	3
CPTR1104	Introduction to Computer Technology	3
ENGL1101	College Writing	3

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.

Course #	Course Title	Crds
	General Education	6
	Communication	3
	Critical Thinking	6
	Natural Sciences	3
	Mathematics/Logical Reasoning	3
	History and the Social and Behavioral Sciences	9
	The Humanities and Fine Arts	9
	Human Diversity	3
	Global Perspective	3
	Ethical and Civic Responsibility	3
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
COMM1140	Interpersonal Communication	3
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
ENGL1101	College Writing	3

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.

Course #	Course Title	Crds
	MnTC Goal Areas	34
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1140	Interpersonal Communication	3
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
4 credits from the following:		
MATH1114	College Algebra	4
MATH1213	Introduction to Statistics	4
3 credits from the following:		
PSYC2220	Abnormal Psychology	3
PSYC2222	Lifespan Development	3
PSYC2224	Social Psychology	3
3 credits from the following:		

PSYC1101	Human Interaction	3
PSYC1500	Positive Psychology	3
PSYC2220	Abnormal Psychology	3
PSYC2222	Lifespan Development	3
PSYC2224	Social Psychology	3
PSYC2226	Behavior and Environmental Management	3
PSYC2230	Personality Psychology	3
PSYC2302	Cross-Cultural Psychology	3
PSYC2950	Introduction to Social Research	3
ENGL1101	College Writing	3
PSYC1200	General Psychology	3
PSYC2900	Statistics for Behavioral and Social Sciences	4

NOTES

Agriculture, Food and Natural Resources

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Environmental Science AS 60

Equine Science AAS 60

Equine Science Diploma 60

Fundamentals of Culinary Arts 60

Minnesota State
Community and Technical College

Environmental Science

Associate of Science (AS) - 60 credits
F M

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
	General Education w/MnTC Goals	8
3 credits from the following:		
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	3
BIOL1108	Environmental Science Issues Lab	1
BIOL1122	General Biology I	4
BIOL1123	General Biology II	4
CHEM1111	General Inorganic Chemistry I	5
CHEM1112	General Inorganic Chemistry II	5
ENGL1101	College Writing	3
MATH1114	College Algebra	4
MATH1115	Functions/Trigonometry	4
MATH1134	Calculus I	5
MATH1213	Introduction to Statistics	4
PHYS1401	College Physics I	4

Equine Science

Associate of Applied Science (AAS) - 60 credits
F

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
	General Education w/MnTC Goals	14
	Career	1
AGRI1400	Farm Marketing and Management	3
ENGL1101	College Writing	3
EQSC1001	Introduction to Equine Science	1
EQSC1050	Equine Anatomy	3
EQSC1060	Equine Reproduction and Nutrition	3
EQSC1130	Stable Operations I	1
EQSC1131	Stable Operations II	2
EQSC1140	Western Horsemanship	3
EQSC1150	Fundamentals of Riding Instruction	2
EQSC1160	English Equitation	3
EQSC1170	Introduction to Horse Training	1
EQSC1180	Equine Evaluation	2
EQSC1190	Farrier Science	2
EQSC1200	Equine Events Management	1
EQSC2200	Recognition and Management of Equine Disorders	3
EQSC2300	Applied Stable Operations	3
EQSC2501	Equine Internship	6
SOC2222	Sociology of Agriculture	3

Equine Science

Diploma - 31 credits
F

This program will provides 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/boarding/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
	Career	1
EQSC1060	Equine Reproduction and Nutrition	3
EQSC1130	Stable Operations I	1
SOC2222	Sociology of Agriculture	3
EQSC1131	Stable Operations II	2
AGRI1400	Farm Marketing and Management	3
EQSC1190	Farrier Science	2
EQSC1001	Introduction to Equine Science	1
EQSC1050	Equine Anatomy	3
EQSC1180	Equine Evaluation	2
EQSC1200	Equine Events Management	1
EQSC1150	Fundamentals of Riding Instruction	2
EQSC1160	English Equitation	3
EQSC1170	Introduction to Horse Training	1
EQSC1140	Western Horsemanship	3

Fundamentals of Culinary Arts

Diploma - 31 credits
M

The mission of the Culinary Arts program is to provide quality education to students who wish to pursue a career of excellence in culinary and hospitality occupations. The program is designed to meet the current and future needs of the food service industry. Demand for employment is high in the industry, which accounts for more than 9 million jobs annually in the United States. Students enrolled in the Culinary Arts program receive hands-on practical lab training paired with traditional academic culinary courses that are aligned with industry needs. The program provides a broad base of education in the culinary field.

Track 1

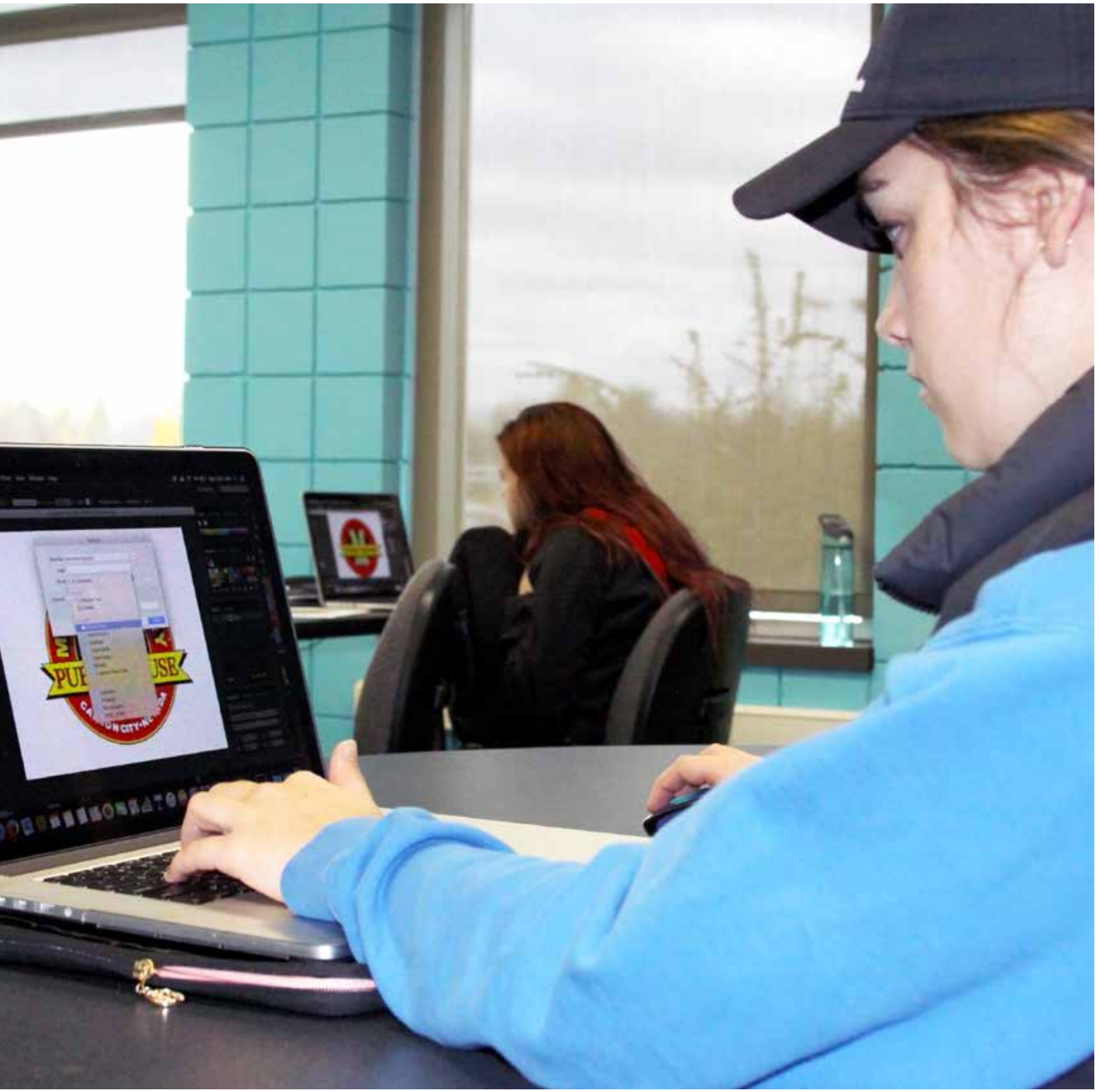
Course #	Course Title	Crds
CULN1200	Fundamentals of Baking and Pastry	6
CULN1205	Theories of Baking and Pastry	2
CULN1210	Fundamentals of Food Fabrication and Production	6
CULN1215	Theory of Food Fabrication and Production	2
CULN1220	Fundamentals of Pantry Production	3
CULN1230	Introduction to Professional Food Service	4
CULN1240	Sanitation Certification	2
CULN1250	Kitchen Math and Measurements	1
CULN1260	Meats	3
CULN1270	Culinary Nutrition	2

Track 2

Course #	Course Title	Crds
CULN1200	Fundamentals of Baking and Pastry	6
CULN1205	Theories of Baking and Pastry	2
CULN1210	Fundamentals of Food Fabrication and Production	6
CULN1215	Theory of Food Fabrication and Production	2
CULN1220	Fundamentals of Pantry Production	3
CULN1230	Introduction to Professional Food Service	4
CULN1240	Sanitation Certification	2
CULN1250	Kitchen Math and Measurements	1
CULN1260	Meats	3
CULN1270	Culinary Nutrition	2

NOTES

Arts, Communication and Computer/Information Systems



+ Not offered academic year 2017-2018

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American Sign Language Studies Certificate 64

Cisco Networking Certificate 64

Computer Programming AAS 64

Graphic Design Technology AAS 64

Graphic Design Technology Certificate 64

Information Technology AAS 65

Information Technology AS 65

Information Technology Database Administration 65

Music AFA 65

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

Minnesota State
Community and Technical College

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.

Course #	Course Title	Crds
ASL1111	American Sign Language and Deaf Culture I	3
ASL1112	American Sign Language and Deaf Culture II	3
ASL1113	ASL & Deaf Culture III	4
ASL1114	ASL & Deaf Culture IV	4
COMM2230	Intercultural Communication	3

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 Cisco CCNA and CompTIA Network+ certification exams offered though VUE or Prometric testing centers.

Course #	Course Title	Crds
CPTR1108	CISCO I	3
CPTR1118	CISCO II	3
CPTR2200	CISCO III	3
CPTR2208	CISCO IV	3

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.

Course #	Course Title	Crds
	Special requirement .....CPTR1100 and CPTR1104 will NOT be counted as technical electives in the Computer Programming AAS.	
	General Education w/MnTC Goals	6
	Mathematics/Logical Reasoning	3
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
COMM1140	Interpersonal Communication	3
6 credits from the following:		
Crs Subject	CPTR	
Crs Subject	CSCI	
Crs Subject	CSEC	
Crs Subject	CTEC	
Crs Subject	CVNP	
Crs Subject	INTD	
Crs Subject	ITSS	
Crs Subject	WEBD	
CPTR1001	Introduction To Programming and Scripting	3
CPTR1106	Microcomputer Databases	3
CPTR1110	Visual Basic Program I	3
CPTR1115	COBOL Programming	4
CPTR1129	RPG Programming	4
CPTR1170	Web Engineering I	3
CPTR2000	Mobile Application Development	3
CPTR2230	Structured Query Language	3
CPTR2238	Database Integration	3
CPTR2242	Java Programming	3
CSCI1110	Informatics	3
CSCI1121	Computer Science I	4
ENGL1101	College Writing	3

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 by learning to meet 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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	9
3 credits from the following:		
GDTC2238	Design Studio	3
GDTC2276	Graphic Design Internship	3
COMM1120	Introduction to Public Speaking	3
ENGL1101	College Writing	3
GDTC1100	Macintosh Production Processes	3
GDTC1113	Design and Layout I	3
GDTC1115	Design and Layout II	3
GDTC1126	Digital Photography	3
GDTC1134	Electronic Drawing I	3
GDTC1144	Electronic Drawing II	3
GDTC1150	Process Printing Theory	3
GDTC2203	Electronic Image Manipulation	3
GDTC2212	Design and Layout III	3
GDTC2214	Integrated Graphic Design	3
GDTC2242	Electronic Publishing	3
GDTC2244	Advanced Electronic Imaging	3
GDTC2258	Graphic Design Professional Practices	3
GDTC2278	Digital Preflight	3

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 GDTC 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-

cintosh technology, basic drawing, print process theories, technical computer illustration and basic design theories. They progress to higher levels of design theory and application, advanced illustration, photo manipulation using image editing software and page layout skills in a page layout computer application. Class curriculum consists of lectures, demonstrations, hands-on application, industry tours and lab work. Students are guided in how to behave and work as a professional in our industry. Instructors teach from real-world experience and, as a result, students are prepared to produce industry-level design work that meets technical criteria for print production, as well as integrate professional expectations of meeting deadlines and being organized. The final result of a student's study is a comprehensive portfolio that showcases the student's technical and design skills. With the student's skills and portfolio, the job market is open to receiving him or her as an efficient graphic design technology employee.

Course #	Course Title	Crds
GDTC1113	Design and Layout I	3
GDTC1115	Design and Layout II	3
GDTC1126	Digital Photography	3
GDTC1134	Electronic Drawing I	3
GDTC1144	Electronic Drawing II	3
GDTC2203	Electronic Image Manipulation	3
GDTC2214	Integrated Graphic Design	3
GDTC2238	Design Studio	3
GDTC2242	Electronic Publishing	3
GDTC2258	Graphic Design Professional Practices	3

Information Technology

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

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
3 credits from the following:		
CPTR2252	Microcomputer Systems Project	3
CPTR2294	Internship	3
CPTR1001	Introduction To Programming and Scripting	3
CPTR1106	Microcomputer Databases	3
CPTR1108	CISCO I	3
CPTR1118	CISCO II	3
CPTR1125	IT Essentials I	3
CPTR1130	IT Essentials II	3
CPTR1135	Beginning Networking	3
CPTR1148	Microcomputer Operating System	3
CPTR2224	Linux I	3
CPTR2236	Network Security	3
CPTR2272	Network Operating Systems	3
CSCI1110	Informatics	3
ENGL1101	College Writing	3
HUM2236	Technology in the Humanities	3
ITSS1100	Information Technology Help Desk	3
ITSS2100	Supporting End-User Applications	3
SOC1111	Introduction to Sociology	3

Information Technology

Associate of Science (AS) - 60 credits
M

The Information Technology Associate of Science degree prepares students to continue to work toward a bachelor's degree or enter the workforce. Students learn to use various hardware and software systems to solve problems for people and organizations. Students work with networking technologies, applications, web technologies and database technologies. Students focus on the selection, application and administration of information technologies. The degree minimizes the number of credits required at selected institutions to complete a bachelor's degree. The degree is an ideal mix of practical experience and general education for a field that is constantly evolving.

Course #	Course Title	Crds
	General Education w/MnTC Goals	14
COMM1120	Introduction to Public Speaking	3
CPTR1001	Introduction To Programming and Scripting	3
CPTR1106	Microcomputer Databases	3
CPTR1108	CISCO I	3
CPTR1122	Microcomputer Maintenance	3
CPTR1170	Web Engineering I	3
CPTR1178	Robotics	3
CPTR2224	Linux I	3
CPTR2236	Network Security	3
CPTR2272	Network Operating Systems	3
CSCI1110	Informatics	3
ENGL1101	College Writing	3
HUM2236	Technology in the Humanities	3
MATH1114	College Algebra	4
PSYC1200	General Psychology	3

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.

Course #	Course Title	Crds
CPTR1001	Introduction To Programming and Scripting	3
CPTR1106	Microcomputer Databases	3
CPTR1108	CISCO I	3
CPTR1170	Web Engineering I	3
CPTR2210	Database Report Generation	3
CPTR2224	Linux I	3
CPTR2230	Structured Query Language	3
CPTR2234	Linux II	3
CPTR2240	Database Administration	3
CPTR2245	Enterprise Network Technologies	3
CPTR2260	Advanced Structured Query Language	3
CPTR2272	Network Operating Systems	3
CPTR2275	Data Analytics	3
CSCI1121	Computer Science I	4
ENGL1101	College Writing	3
HUM2236	Technology in the Humanities	3
MATH1100	World of Math	3
MATH1114	College Algebra	4
MATH1213	Introduction to Statistics	4

Music

Associate of Fine Arts (AFA) - 68 credits
F

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	15
1 credits from the following:		
MUSC1151	Individual Voice Lessons	1
MUSC1181	Private Instrumental Lessons	1
MUSC1185	Private Music Composition Lessons	1
MUSC1191	Individual Piano Lessons	1
2 credits from the following:		
MUSC1135	Voice Ensemble	1

MUSC1141	Concert Choir	1
MUSC1162	Jazz Ensemble	1
MUSC1164	Concert Band	1
MUSC1168	Pep Band	1
2 credits from the following:		
MUSC1135	Voice Ensemble	1
MUSC1141	Concert Choir	1
MUSC1162	Jazz Ensemble	1
MUSC1164	Concert Band	1
MUSC1168	Pep Band	1
2 credits from the following:		
MUSC1135	Voice Ensemble	1
MUSC1141	Concert Choir	1
MUSC1162	Jazz Ensemble	1
MUSC1164	Concert Band	1
MUSC1168	Pep Band	1
2 credits from the following:		
MUSC1151	Individual Voice Lessons	1
MUSC1181	Private Instrumental Lessons	1
MUSC1185	Private Music Composition Lessons	1
MUSC1191	Individual Piano Lessons	1
MUSC2251	Individual Voice Lessons	2
MUSC2281	Private Instrumental Lessons	2
MUSC2285	Advanced Music Composition	2
MUSC2291	Individual Piano Lessons	2
2 credits from the following:		
MUSC1135	Voice Ensemble	1
MUSC1141	Concert Choir	1
MUSC1162	Jazz Ensemble	1
MUSC1164	Concert Band	1
MUSC1168	Pep Band	1
2 credits from the following:		
MUSC1151	Individual Voice Lessons	1
MUSC1181	Private Instrumental Lessons	1
MUSC1185	Private Music Composition Lessons	1
MUSC1191	Individual Piano Lessons	1
MUSC2251	Individual Voice Lessons	2
MUSC2281	Private Instrumental Lessons	2
MUSC2285	Advanced Music Composition	2
MUSC2291	Individual Piano Lessons	2
2 credits from the following:		
MUSC1114	Beginning Class Piano	2
MUSC2291	Individual Piano Lessons	2
2 credits from the following:		
MUSC1151	Individual Voice Lessons	1
MUSC1181	Private Instrumental Lessons	1
MUSC1185	Private Music Composition Lessons	1
MUSC1191	Individual Piano Lessons	1
MUSC2251	Individual Voice Lessons	2
MUSC2281	Private Instrumental Lessons	2
MUSC2285	Advanced Music Composition	2
MUSC2291	Individual Piano Lessons	2
ENGL1101	College Writing	3
ENGL1205	Writing About Literature	3
MUSC1115	America's Musical Heritage	3
MUSC1116	World Music	3
MUSC1117	Beginning Class Guitar	2
MUSC1120	Introduction to Music Technology	3
MUSC1121	Basic Theory and Musicianship I	3
MUSC1122	Basic Theory and Musicianship II	3
MUSC1123	Sight Singing and Ear Training I	1
MUSC1124	Sight Singing and Ear Training II	1
MUSC2223	Sight Singing and Ear Training III	1
MUSC2224	Sight Singing and Ear Training IV	1
MUSC2231	Advanced Theory and Musicianship III	3
MUSC2232	Advanced Theory and Musicianship IV	3
PHYS1107	Physics of Music	3

Network Administration and Security

Associate of Applied Science (AAS) - 60 credits
M

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 skills 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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
3 credits from the following:		
CPTR1170	Web Engineering I	3
CPTR1178	Robotics	3
CPTR2200	CISCO III	3
CPTR2208	CISCO IV	3
CPTR2230	Structured Query Language	3
CPTR2234	Linux II	3
CPTR2250	IT Supervised Occupational Experience	3
CPTR2260	Advanced Structured Query Language	3
CPTR2294	Internship	3
CPTR2296	Topics in Computers	3
CSCI1121	Computer Science I	4
CSCI1122	Computer Science II	4
CSEC2212	Web Security	3
CVNP2212		
3 credits from the following:		
CPTR1170	Web Engineering I	3
CPTR1178	Robotics	3
CPTR2200	CISCO III	3
CPTR2208	CISCO IV	3
CPTR2230	Structured Query Language	3
CPTR2234	Linux II	3
CPTR2260	Advanced Structured Query Language	3
CPTR2294	Internship	3
CPTR2296	Topics in Computers	3
CSCI1121	Computer Science I	4
CSCI1122	Computer Science II	4
CSEC2212	Web Security	3
CVNP2212		
COMM1120	Introduction to Public Speaking	3
CPTR1001	Introduction To Programming and Scripting	3
CPTR1106	Microcomputer Databases	3
CPTR1108	CISCO I	3
CPTR1118	CISCO II	3
CPTR1122	Microcomputer Maintenance	3
CPTR2224	Linux I	3
CPTR2236	Network Security	3
CPTR2245	Enterprise Network Technologies	3
CPTR2272	Network Operating Systems	3
CSCI1110	Informatics	3
CSEC2204	Managing Directory Services	3
CSEC2210	Security Breaches and Countermeasures	3
CSEC2228	Network Defense	3
ENGL1101	College Writing	3
HUM2236	Technology in the Humanities	3

Network Security

Certificate - 18 credits
M O

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 preparation for a job in network security.

Course #	Course Title	Crds
CSEC2214	Topics in Network Security	3
CSEC2212	Web Security	3
CSEC2228	Network Defense	3
CSEC2210	Security Breaches and Countermeasures	3
CPTR2236	Network Security	3
CPTR2234	Linux II	3

Sign Language Interpreter Preparation

Associate of Applied Science (AAS) - 64 credits
M

The Sign Language Interpreter Preparation program prepares individuals to work as interpreters facilitating and mediating communication between deaf/hard of hearing and hearing people. Students will gain sign language skills, an understanding of deaf culture, knowledge of the interpreter's role and skill development for the profession of sign language interpreting. Students will experience a variety of learning environments including classroom work, laboratory practice and field placement.

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
ASL1111	American Sign Language and Deaf Culture I	3
ASL1112	American Sign Language and Deaf Culture II	3
ASL1113	American Sign Language and Deaf Culture III	4
ASL1114	American Sign Language and Deaf Culture IV	4
ASL1115	American Sign Language and Deaf Culture V	3
ASL2000	Advanced Fingerspelling, Numbers and Classifiers	2
ASL2100	Linguistics of American Sign Language	3
COMM1120	Introduction to Public Speaking	3
COMM2230	Intercultural Communication	3
ENGL1101	College Writing	3
IPP1111	Introduction to Interpreting	3
IPP1112	Beginning American Sign Language to English	3
IPP1113	Beginning English to American Sign Language	3
IPP2112	Advanced American Sign Language to English	3
IPP2113	Advanced English to American Sign Language	3
IPP2114	Educational Interpreting	2
IPP2215	Topics in Interpreting	2
IPP2216	Practicum	1
IPP2217	Interpreting Internship	6
IPP2218	Internship Seminar	1
PSYC1200	General Psychology	3

Sign Language Interpreter - Medical

Certificate - 18 credits
O

The Sign Language Interpreting - 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.

Course #	Course Title	Crds
ASLM1110	Introduction to Medical Interpreting	3
ASLM1111	Ethical Decision Making for Medical Interpreters	2
ASLM1112	Medical Signs	2
ASLM1113	Special Topics in the Field of Medical Interpreting	2
ASLM1114	Introduction to Mental Health Interpreting	3
HLTH1110	Introduction to Anatomy and Physiology	3
HLTH1116	Medical Terminology	3

Theatre Arts

Associate of Fine Arts (AFA) - 60 credits
F

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 explore performance and production. The degree ensures that students will have the necessary coursework to prepare for transfer and advanced studies in theatre.

Course #	Course Title	Crds
	Special requirement: Remaining MnTC Goal Areas (Goal areas to be covered: 2, 3, 4, 5, 7, 8, 9, and 10). Students are advised to take courses meeting multiple goal areas in order to fulfill MnTC requirements within 40 credits). [MnTC Goal Area 2: Critical Thinking	31
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1140	Interpersonal Communication	3
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
ENGL1101	College Writing	3
THTR1100	Introduction to Theatre	3
THTR1105	Acting I	3
THTR1125	Theatre Technical Practicum	2
THTR1130	Stage Make-up	3
THTR1140	Stagecraft	3
THTR2120	Script Analysis	3
THTR2130	Design for the Stage	3

Theatre Transfer Pathway

Associate of Fine Arts (AFA) - 60 credits
F

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 explore 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.

Course #	Course Title	Crds
	Special requirement: MnTC Goal Areas (Goal areas to be covered: 2, 3, 4, 5, 7, 8, 9, and 10). Students are advised to take courses meeting multiple goal areas in order to fulfill MnTC requirements within 40 credits). [MnTC Goal Area 2: Critical Thinking	31
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1140	Interpersonal Communication	3
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
ENGL1101	College Writing	3
THTR1100	Introduction to Theatre	3
THTR1105	Acting I	3
THTR1125	Theatre Technical Practicum	2
THTR1130	Stage Make-up	3
THTR1140	Stagecraft	3
THTR2120	Script Analysis	3
THTR2130	Design for the Stage	3

Visual Art

Associate of Fine Arts (AFA) - 60 credits
F

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	12
	Natural Sciences	1
	Natural Sciences	3
3 credits from the following:		
ART1140	Handbuilt Ceramics	3
ART1141	Ceramics I	3
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
COMM1140	Interpersonal Communication	3
3 credits from the following:		
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3
9 credits from the following:		
ART1112	Painting I	3
ART1117	Printmaking I	3
ART2111	Drawing II	3
ART2112	Painting II	3
ART2114	Photographic Art I	3
ART2116	Mixed Media I	3
ART2241	Advanced Ceramics	3
GLST1121		
GLST1126		
HUM1120	Culture of Italy	3
HUM2210	Introduction to Film	3
ART1107	Foundations of Art, 2-D	3
ART1108	Foundations of Art, 3-D	3
ART1111	Drawing I	3
ART1121	World of Art I	3
ART1122	World of Art II	3
ART2260	Art, Portfolio Design and Professional Development	1
ART2999	AFA-Visual Art Capstone Exhibition	1
ENGL1101	College Writing	3
HIST2213	American History: 20th Century	3
PHIL1201	Ethics	3

Web Design

Certificate - 30 credits
O

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.

Course #	Course Title	Crds
WEBD1000	Foundations of Web Design	3
WEBD1010	HTML	3
WEBD1020	Photoshop	3
WEBD1030	Multimedia	3
WEBD1110	Cascading Style Sheets	3
WEBD1130	Electronic Commerce	3
WEBD1140	JavaScript	3
WEBD2010	Content Management Systems	3
WEBD2020	User Interface Design	3
WEBD2030	Search Engine Optimization	3

NOTES

Business, Administration and Management

+ Not offered academic year 2017-2018

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Minnesota State
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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

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
6 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:		
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:		
ECON2210	Macroeconomics	3
ECON2222	Microeconomics	3
ACCT1101	Payroll	3
ACCT1108	Business Math and Calculators	3
ACCT1120	Business Law	3
ACCT1124	Spreadsheet Applications	3
ACCT2201	Financial Accounting I Lab	1
ACCT2202	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 I	4
ACCT2622	Intermediate Accounting II	4
COMM1120	Introduction to Public Speaking	3
CPTR1104	Introduction to Computer Technology	3
ENGL1101	College Writing	3
PDEV1102	Contemporary Career Search	1

Spring Start

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
6 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:		
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:		
ECON2210	Macroeconomics	3
ECON2222	Microeconomics	3
ACCT1101	Payroll	3
ACCT1108	Business Math and Calculators	3
ACCT1120	Business Law	3
ACCT1124	Spreadsheet Applications	3
ACCT2201	Financial Accounting I Lab	1
ACCT2202	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 I	4
ACCT2622	Intermediate Accounting II	4
COMM1120	Introduction to Public Speaking	3
CPTR1104	Introduction to Computer Technology	3
ENGL1101	College Writing	3
PDEV1102	Contemporary Career Search	1

Accounting

Associate of Science (AS) - 60 credits
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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	8
3 credits from the following:		
ACCT1108	Business Math and Calculators	3
BUS1146	Personal Finance	3
3 credits from the following:		
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
ACCT2213	Managerial Accounting	3
ACCT2215	Computerized Accounting Applications	3
ACCT2255	Income Tax-Individual	3
BUS1120	Spreadsheet and Database Concepts	3
BUS2150	Legal Environment of Business	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
COMM1120	Introduction to Public Speaking	3
ECON2210	Macroeconomics	3
ECON2222	Microeconomics	3
ENGL1101	College Writing	3
MATH1114	College Algebra	4
PHIL1201	Ethics	3

Accounting

Diploma - 63 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

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
	Communication	3
6 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:		
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
ACCT1101	Payroll	3
ACCT1108	Business Math and Calculators	3
ACCT1120	Business Law	3
ACCT1124	Spreadsheet Applications	3
ACCT2201	Financial Accounting I Lab	1
ACCT2202	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 I	4
ACCT2622	Intermediate Accounting II	4
CPTR1104	Introduction to Computer Technology	3
PDEV1102	Contemporary Career Search	1

Spring Start

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
	Communication	3
6 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:		
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
ACCT1101	Payroll	3
ACCT1108	Business Math and Calculators	3
ACCT1120	Business Law	3
ACCT1124	Spreadsheet Applications	3
ACCT2201	Financial Accounting I Lab	1
ACCT2202	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 I	4
ACCT2622	Intermediate Accounting II	4
CPTR1104	Introduction to Computer Technology	3
PDEV1102	Contemporary Career Search	1

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 state and federal tax returns. Both manual and computerized accounting concepts and applications are included.

Fall Start

Course #	Course Title	Crds
	Special requirement: Credits from any of the following choices:ACCT 2640, ACCT 2630, ACCT 2800, ACCT 2256, ACCT 2291, CPTR 1106, Any BUSN, MKTG, HRES, ADMS or any MNTC	3
	Communication	3
ACCT1101	Payroll	3
ACCT1108	Business Math and Calculators	3
ACCT1124	Spreadsheet Applications	3
ACCT2201	Financial Accounting I Lab	1
ACCT2202	Financial Accounting II Lab	1
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
ACCT2216	QuickBooks	3
ACCT2255	Income Tax-Individual	3
CPTR1104	Introduction to Computer Technology	3
PDEV1102	Contemporary Career Search	1

Spring Start

Course #	Course Title	Crds
	Special requirement: Credits from any of the following choices:ACCT 2640, ACCT 2630, ACCT 2800, ACCT 2256, ACCT 2291, CPTR 1106, Any BUSN, MKTG, HRES, ADMS, or any MNTC	3
	Communication	3
ACCT1101	Payroll	3
ACCT1108	Business Math and Calculators	3
ACCT1124	Spreadsheet Applications	3
ACCT2201	Financial Accounting I Lab	1
ACCT2202	Financial Accounting II Lab	1
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
ACCT2216	QuickBooks	3
ACCT2255	Income Tax-Individual	3
CPTR1104	Introduction to Computer Technology	3
PDEV1102	Contemporary Career Search	1

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 will 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.

Course #	Course Title	Crds
	Communication	3
ACCT1012	Principles of Bookkeeping	3
ADMS1100	Keyboarding I	3
ADMS1110	Word Processing	3
ADMS1116	Business Communications I	3
ADMS1120	Administrative Office Procedures	3
ADMS1128	Records Management	3
ADMS1130	Office Software Applications	3
ADMS1140	Administrative Office Professional Internship I	2
ADMS1190	Keyboarding II	1
ADMS1310	Critical Workplace Skills	3
ADMS2216	Business Communications II	3

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

Course #	Course Title	Crds
ACCT2216	QuickBooks	3
ADMS1130	Office Software Applications	3
3 credits from the following:		
ADMS2212	Advanced Office Software Applications	3
BUS1300	Financial Statement Analysis	3
FNCS1110	Introduction to Financial Services	3
FNCS1119	Personal Finance Products/Customer Service	3
FNCS2221	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:		
ADMS2124	Emerging Office Technologies	3
BUS1300	Financial Statement Analysis	3
FNCS1110	Introduction to Financial Services	3
FNCS1119	Personal Finance Products/Customer Service	3
FNCS2221	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
FNCS1110	Introduction to Financial Services	3

FNCS1119	Personal Finance Products/Customer Service	3
FNCS2221	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
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	1
ADMS2240	Administrative Office Professional Internship II	3

FNCS Track

Course #	Course Title	Crds
	FNCS	9
3 credits from the following:		
COMM1100	Power and Communications in Human Relations	3
COMM1140	Interpersonal Communication	3
ENGL1215	Professional and Technical Writing	3
ACCT1012	Principles of Bookkeeping	3
ACCT2216	QuickBooks	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
ADMS1130	Office Software Applications	3
ADMS1190	Keyboarding II	1
ADMS2205	Advanced Word Processing	1
ADMS2240	Administrative Office Professional Internship II	3

HRES Track

Course #	Course Title	Crds
	HRES	9
3 credits from the following:		
COMM1100	Power and Communications in Human Relations	3
COMM1140	Interpersonal Communication	3
ENGL1215	Professional and Technical Writing	3
ACCT1012	Principles of Bookkeeping	3
ACCT2216	QuickBooks	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
ADMS1130	Office Software Applications	3
ADMS1190	Keyboarding II	1
ADMS2205	Advanced Word Processing	1
ADMS2240	Administrative Office Professional Internship II	3

PARA Track

Course #	Course Title	Crds
	PARA	9
3 credits from the following:		
COMM1100	Power and Communications in Human Relations	3
COMM1140	Interpersonal Communication	3
ENGL1215	Professional and Technical Writing	3
ACCT1012	Principles of Bookkeeping	3
ACCT2216	QuickBooks	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
ADMS1130	Office Software Applications	3
ADMS1190	Keyboarding II	1
ADMS2205	Advanced Word Processing	1
ADMS2240	Administrative Office Professional Internship II	3

Administrative Office Assistant - Finance

Certificate - 18 credits
M O

This program covers the basic fundamentals of office assisting and offers an introduction to finance, providing students with the skills needed to obtain entry-level jobs as member service representatives, customer relations associates, office assistants and front desk agents. The Administrative Office Assistant - Finance certificate provides students with additional options to obtain a diploma, if desired.

Course #	Course Title	Crds
3 credits from the following:		
ADMS1120	Administrative Office Procedures	3
ADMS1128	Records Management	3
9 credits from the following:		
BUS1300	Financial Statement Analysis	3
FNCS1110	Introduction to Financial Services	3
FNCS1119	Personal Finance Products/Customer Service	3
FNCS2221	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 human resources emphasis. This certificate will provide 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 AAS degree.

Course #	Course Title	Crds
3 credits from the following:		
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 used and professional skills required in the field through specialized coursework unique to the legal profession.

Course #	Course Title	Crds
3 credits from the following:		
ADMS1120	Administrative Office Procedures	3
ADMS1130	Office Software Applications	3
ADMS1110	Word Processing	3
ADMS1116	Business Communications I	3
PARA1101	Introduction to Paralegal	3
PARA1102	Legal Research and Writing I	3
PARA1105	Criminal Law for Paralegals	3

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.

Course #	Course Title	Crds
	Career	9
	General Education w/MnTC Goals	1
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
3 credits from the following:		
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
ACCT2213	Managerial Accounting	3
BUS1120	Spreadsheet and Database Concepts	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
BUS2220	Global Business	3
COMM1120	Introduction to Public Speaking	3
ECON2210	Macroeconomics	3
ECON2222	Microeconomics	3
ENGL1101	College Writing	3
MATH1114	College Algebra	4
MATH1122	Applied Calculus and Linear Algebra	3
MATH1213	Introduction to Statistics	4

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	4
	Career	8
3 credits from the following:		
PHIL1200	Applied and Professional Ethics	3
PHIL1201	Ethics	3
3 credits from the following:		
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3
ACCT2210	Managerial Accounting	4
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
BUS2150	Legal Environment of Business	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
COMM1120	Introduction to Public Speaking	3
ECON2210	Macroeconomics	3
ECON2222	Microeconomics	3
ENGL1101	College Writing	3
MATH1114	College Algebra	4
MATH1213	Introduction to Statistics	4
MIS1100	Business Computers	3

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
ACCT1108	Business Math and Calculators	3
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
ACCT2213	Managerial Accounting	3
ACCT2215	Computerized Accounting Applications	3
ACCT2255	Income Tax-Individual	3
BUS1120	Spreadsheet and Database Concepts	3
BUS1141	Introduction to Business	3
BUS1143	Office Procedures	3
BUS1146	Personal Finance	3
BUS2150	Legal Environment of Business	3
BUS2202	Management Information Systems	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
CSCI1155	Computer Utilization in Business & Society	3
ECON2210	Macroeconomics	3
ECON2222	Microeconomics	3
ENGL1101	College Writing	3

Business Administration

Certificate - 30 credits
F

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.

Course #	Course Title	Crds
ACCT1108	Business Math and Calculators	3
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
ACCT2215	Computerized Accounting Applications	3
ACCT2255	Income Tax-Individual	3
BUS1120	Spreadsheet and Database Concepts	3
BUS1141	Introduction to Business	3
BUS1143	Office Procedures	3
BUS1146	Personal Finance	3
CSCI1155	Computer Utilization in Business and Society	3

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.

Course #	Course Title	Crds
	3 credits from the following:	
	Crs Subject BUS	
	Crs Subject FNCS	
ACCT1108	Business Math and Calculators	3
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
BUS1120	Spreadsheet and Database Concepts	3
BUS1141	Introduction to Business	3
BUS1146	Personal Finance	3
BUS1174	Principles of Banking	3

BUS1175	Fundamentals of Investing	3
BUS2150	Legal Environment of Business	3
BUS2202	Management Information Systems	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
BUS2275	Money and Banking	3
COMM1140	Interpersonal Communication	3
ECON2210	Macroeconomics	3
ECON2222	Microeconomics	3
ENGL1101	College Writing	3
PHIL1201	Ethics	3
PSYC1200	General Psychology	3

Business Entrepreneurship

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

Entrepreneurs create their own path to success and work to make their dreams a 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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
	Career	6
	History and the Social and Behavioral Sciences	3
ACCT1108	Business Math and Calculators	3
ACCT1124	Spreadsheet Applications	3
ACCT2211	Financial Accounting I	3
ADMS1116	Business Communications I	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
COMM1120	Introduction to Public Speaking	3
CPTR1104	Introduction to Computer Technology	3
ECON2210	Macroeconomics	3
ENGL1101	College Writing	3
ENTR1100	Introduction to Entrepreneurship	3
ENTR1400	Opportunity Analysis	3
ENTR2200	Entrepreneurial Field Studies	3
ENTR2220	Business Ethics/Professionalism	3
ENTR2222	Business Plan Development	3
MKTG1110	Customer Service	3

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 will prepare students for business management but also enable 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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
ACCT1108	Business Math and Calculators	3
ACCT1124	Spreadsheet Applications	3
ACCT2211	Financial Accounting I	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
CPTR1104	Introduction to Computer Technology	3
ENTR1400	Opportunity Analysis	3
ENTR2200	Entrepreneurial Field Studies	3
ENTR2222	Business Plan Development	3
MKTG1110	Customer Service	3

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
3 credits from the following:		
ACCT1012	Principles of Bookkeeping	3
ACCT2211	Financial Accounting I	3
3 credits from the following:		
CPTR1104	Introduction to Computer Technology	3
CSCI1155	Computer Utilization in Business & Society	3
MKTG2234	Computer Marketing Applications	3
3 credits from the following:		
ECON2210	Macroeconomics	3
ECON2222	Microeconomics	3
3 credits from the following:		
ENTR1400	Opportunity Analysis	3
MKTG2230	Marketing Research	3
3 credits from the following:		
ENTR1100	Introduction to Entrepreneurship	3
MKTG2236	Small Business Management	3
ACCT1108	Business Math and Calculators	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
BUS2220	Global Business	3
COMM1120	Introduction to Public Speaking	3
ENGL1101	College Writing	3
HRES1122	Human Resource Management	3
MKTG1106	Professional Selling	3
MKTG1110	Customer Service	3
MKTG1116	Advertising and Promotion	3
MKTG2204	Advanced Professional Selling	3
MKTG2214	E-Marketing	3
MKTG2218	Retail Management	3
MKTG2290	Management, Marketing and Sales Internship	3
MKTG2410	Marketing, Management, and Sales Capstone	3

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.

Course #	Course Title	Crds
	Communication	3
3 credits from the following:		
CPTR1104	Introduction to Computer Technology	3
CSCI1155	Computer Utilization in Business & Society	3
MKTG2234	Computer Marketing Applications	3
3 credits from the following:		
ENTR1400	Opportunity Analysis	3
MKTG2230	Marketing Research	3
ACCT1108	Business Math and Calculators	3
BUS2204	Principles of Management	3
BUS2206	Principles of Marketing	3
MKTG1106	Professional Selling	3
MKTG1110	Customer Service	3
MKTG1116	Advertising and Promotion	3
MKTG2204	Advanced Professional Selling	3
MKTG2218	Retail Management	3

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.

Course #	Course Title	Crds
BUS2204	Principles of Management	3
ENTR1100	Introduction to Entrepreneurship	3
ENTR2220	Business Ethics/Professionalism	3

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.

Course #	Course Title	Crds
ENTR1400	Opportunity Analysis	3
ENTR2222	Business Plan Development	3
MKTG1110	Customer Service	3

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.

Course #	Course Title	Crds
ACCT1108	Business Math and Calculators	3
ACCT2211	Financial Accounting I	3
BUS2206	Principles of Marketing	3
CPTR1104	Introduction to Computer Technology	3
ENTR1100	Introduction to Entrepreneurship	3
ENTR2222	Business Plan Development	3

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.

Course #	Course Title	Crds
	Career	9
3 credits from the following:		
PHIL1200	Applied and Professional Ethics	3
PHIL1201	Ethics	3
ADMS1110	Word Processing	3
ADMS1116	Business Communications I	3
ADMS1128	Records Management	3
COMM1120	Introduction to Public Speaking	3
CPTR1104	Introduction to Computer Technology	3
ENGL1101	College Writing	3
HRES1122	Human Resource Management	3
HRES1126	Employee Processes	3
HRES1130	Benefits Administration	3
HRES1134	Training and Development	3
HRES2204	Policy Administration	3
HRES2212	Wage/Salary Administration	3
HRES2224	Employee/Labor Relations	3
HRES2254	Human Resource Systems and Portfolio Evaluation	3
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3

Human Resources

Associate of Science (AS) - 60 credits
M O

Human resources programs prepare students to provide support to companies and to individual employees in the area of human resources. Associate of 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. The AS program is specifically designed for more efficient course transfer to partner universities for students wishing to continue with additional education.

Course #	Course Title	Crds
3 credits from the following:		
PHIL1200	Applied and Professional Ethics	3
PHIL1201	Ethics	3
ADMS1110	Word Processing	3
COMM1120	Introduction to Public Speaking	3
CPTR1104	Introduction to Computer Technology	3
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3
HRES1122	Human Resource Management	3
HRES1126	Employee Processes	3
HRES1130	Benefits Administration	3
HRES1134	Training and Development	3
HRES2204	Policy Administration	3
HRES2212	Wage/Salary Administration	3
HRES2224	Employee/Labor Relations	3
HRES2254	Human Resource Systems and Portfolio Evaluation	3
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3

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.

Fall Start

Course #	Course Title	Crds
	Communication	3
ACCT1101	Payroll	3
ACCT1108	Business Math and Calculators	3
ACCT1124	Spreadsheet Applications	3
ACCT2201	Financial Accounting I Lab	1
ACCT2202	Financial Accounting II Lab	1
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3

ACCT2216	QuickBooks	3
CPTR1104	Introduction to Computer Technology	3
HRES1122	Human Resource Management	3
HRES1130	Benefits Administration	3
PDEV1102	Contemporary Career Search	1

Spring Start

Course #	Course Title	Crds
	Communication	3
ACCT1101	Payroll	3
ACCT1108	Business Math and Calculators	3
ACCT1124	Spreadsheet Applications	3
ACCT2201	Financial Accounting I Lab	1
ACCT2202	Financial Accounting II Lab	1
ACCT2211	Financial Accounting I	3
ACCT2212	Financial Accounting II	3
ACCT2216	QuickBooks	3
CPTR1104	Introduction to Computer Technology	3
HRES1122	Human Resource Management	3
HRES1130	Benefits Administration	3
PDEV1102	Contemporary Career Search	1

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.

Course #	Course Title	Crds
COMM1120	Introduction to Public Speaking	3
MKTG1106	Professional Selling	3
MKTG1110	Customer Service	3

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.

Course #	Course Title	Crds
9 credits from the following:		
ADMS1116	Business Communications I	3
ADMT2236	Administrative Project Management	3
CPTR1104	Introduction to Computer Technology	3
MKTG1110	Customer Service	3
MKTG1138	Leadership Development I	1
MKTG2214	E-Marketing	3
SUPL1110	Budget and Financial Management	3
SUPL1118	Lead and Facilitate Teams	3
BUS2204	Principles of Management	3
COMM1140	Interpersonal Communication	3
HRES1122	Human Resource Management	3

NOTES

Engineering, Manufacturing and Technology

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Architectural Drafting

Diploma - 35 credits
D

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	Crds
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
CONM1124	Building Systems	3
CONM2206	Building Codes	2
ENGL1101	College Writing	3
ENGT1118	Construction and Manufacturing Math	3
ENGT1126	Engineering Graphics	3
ENGT1134	Office Systems and Equipment	3

Architectural Drafting and Design

Associate of Applied Science (AAS) - 72 credits
D

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 design professions and is an important part of the Architectural Drafting and Design 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	Crds
	General Education w/MnTC Goals	9
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
CONM1108	Principles of Estimating	4
CONM1124	Building Systems	3
CONM2206	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

Automotive Service Technology

Associate of Applied Science (AAS) - 72 credits
M

The automotive service technician works in an exciting and rapidly changing industry. Students in this program are 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	Crds
	General Education w/MnTC Goals	6
3 credits from the following:		
	Crs Subject HUM	
	Crs Subject PHIL	
	Crs Subject SOC	
3 credits from the following:		
	Crs Subject BUS	
	Crs Subject ECON	
3 credits from the following:		
	Crs Subject COMM	
	Crs Subject ENGL	
AMST1102	Alignment and Suspension I	3
AMST1105	Brakes 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

Automotive Service Technology

Diploma - 66 credits
M

Automotive service technicians work in an exciting and rapidly changing industry. Students in this program will receive training in the many service and diagnostic procedures necessary to maintain our nation on wheels. 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	Crds
	General Education w/MnTC Goals	9
AMST1102	Alignment and Suspension I	3
AMST1105	Brakes 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

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
	General Education w/MnTC Goals	9
CADD1000	AutoCAD Basics	3
CIVL1100	Survey I: Fundamentals of Surveying	3
CIVL1119	Survey II: Land Surveys	3
CIVL1138	CADD II: Plan Layout	3
CIVL2209	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
CIVL2246	Introduction to Hydrology	3
COMM1120	Introduction to Public Speaking	3
CONM2204	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
	Special requirement .....Students must complete the HVAC/R program to enroll into the Commercial Refrigeration program.	
COMM1130	Small Group Communication	3
REFR2202	Commercial Refrigeration and Air Conditioning Principles	4
REFR2204	Commercial Refrigeration and Air Conditioning Lab	3
REFR2206	Commercial Electrical Principles	3
REFR2208	Commercial Electrical Lab	3
REFR2211	Advanced Refrigeration Principles	4
REFR2212	Advanced Refrigeration Lab	3
REFR2213	Advanced Electrical Theory	3
REFR2215	Advanced Electrical Applications	3
REFR2216	Refrigeration Internship	3
REFR2217	Commercial Grocery Store Refrigeration	3

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
	General Education w/MnTC Goals	3
3 credits from the following:		
ACCT1101	Payroll	3
BUS2204	Principles of Management	3
3 credits from the following:		
ACCT1120	Business Law	3
BLDG1000	Introduction to the Construction Trades	3
3 credits from the following:		
CPTR1104	Introduction to Computer Technology	3
CSCI1110	Informatics	3
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
BIOL1107	Environmental Science Issues	3
CADD1102	Fundamentals of CADD	4
CONM1101	Construction Documents and Codes	3
CONM1102	Site/Building Layout	2
CONM1104	Construction Management Principles	2
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
CONM2217	Computer Estimating and Bidding	3
CONM2222	Construction Management Internship	2
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3
ENGT1118	Construction and Manufacturing Math	3
ENGT1126	Engineering Graphics	3
MCDD2206	Mechanical Engineering Drawing IV	2

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, starting and suspension systems, wheel alignment, air-conditioning and refrigeration systems, drive lines, differentials, hydraulic and air brake systems, electrical systems, electronically controlled fuel systems and transmissions, and involves instruction in the use of a wide 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.

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Course #	Course Title	Crds
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
COMM1140	Interpersonal Communication	3
1 credits from the following:		
HLTH1122	CPR-First Aid	1
PDEV1102	Contemporary Career Search	1
CPTR1100	Fundamental Computer Concepts	1
DCNH1116	CNH (Case New Holland) Supervised Occupational Experience (SOE) I	3
DCNH1118	CNH (Case New Holland) Supervised Occupational Experience (SOE) II	7
DCNH2210	Mobile Hydraulics	4
DCNH2218	CNH (Case New Holland) Supervised Occupational Experience (SOE) III	3

DCNH2238	Transmissions and Drive Systems	4
DCNH2242	Advanced Engines and Fuel Systems	6
DSET1100	Diesel Equipment Fundamentals	2
DSET1101	Software Systems in Transportation	2
DSET1106	Fuel Systems	2
DSET1110	Power Train I	3
DSET1112	Hydraulics I	4
DSET1124	Diesel Shop Management	1
DSET1130	Trans Elec/Start/Charge	4
DSET1132	Introduction to Engine Theory	2
DSET1134	Introduction to Engines	3
DSET1144	Electrical Troubleshooting	3
DSET2204	Advanced Electrical and Emission Systems	3
DSET2206	Electronic Controls	3
ECON1150	Essentials of Economics	3
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3
SOC1111	Introduction to Sociology	3
TRNS1112	Heating Ventilation A/C	3

GENERAL OPTION

Course #	Course Title	Crds
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
COMM1140	Interpersonal Communication	3
3 credits from the following:		
DSET1114	Vehicle Brakes	3
DSET1116	Fall Supervised Occupational Experience	3
1 credits from the following:		
HLTH1122	CPR-First Aid	1
PDEV1102	Contemporary Career Search	1
CPTR1100	Fundamental Computer Concepts	1
DSET1100	Diesel Equipment Fundamentals	2
DSET1101	Software Systems in Transportation	2
DSET1106	Fuel Systems	2
DSET1110	Power Train I	3
DSET1112	Hydraulics I	4
DSET1124	Diesel Shop Management	1
DSET1130	Trans Elec/Start/Charge	4
DSET1132	Introduction to Engine Theory	2
DSET1134	Introduction to Engines	3
DSET1140	Supervised Occupational Experience I	7
DSET1144	Electrical Troubleshooting	3
DSET2204	Advanced Electrical and Emission Systems	3
DSET2206	Electronic Controls	3
DSET2210	Mobile Hydraulics	4
DSET2238	Transmissions and Drive Systems	4
DSET2240	Supervised Occupational Experience II	3
DSET2242	Advanced Engines and Fuel Systems	6
ECON1150	Essentials of Economics	3
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3
SOC1111	Introduction to Sociology	3
TRNS1112	Heating Ventilation A/C	3

TRUCK OPTION

Course #	Course Title	Crds
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
COMM1140	Interpersonal Communication	3
1 credits from the following:		
HLTH1122	CPR-First Aid	1
PDEV1102	Contemporary Career Search	1
CPTR1100	Fundamental Computer Concepts	1
DSET1100	Diesel Equipment Fundamentals	2
DSET1101	Software Systems in Transportation	2
DSET1106	Fuel Systems	2
DSET1110	Power Train I	3
DSET1112	Hydraulics I	4
DSET1114	Vehicle Brakes	3
DSET1124	Diesel Shop Management	1
DSET1130	Trans Elec/Start/Charge	4
DSET1132	Introduction to Engine Theory	2
DSET1134	Introduction to Engines	3
DSET1144	Electrical Troubleshooting	3
DSET2204	Advanced Electrical and Emission Systems	3
DSET2206	Electronic Controls	3
DTRK1140	Supervised Occupational Experience 1	7
DTRK2214	Suspension and Alignment	3
DTRK2238	Transmissions and Drive Systems	4
DTRK2240	Supervised Occupational Experience II	4
DTRK2242	Advanced Engines and Fuel Systems	6
ECON1150	Essentials of Economics	3
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3
SOC1111	Introduction to Sociology	3
TRNS1112	Heating Ventilation A/C	3

Diesel Equipment Technology

Diploma - 65 credits
M

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 system hydraulics and engines. This program is an Association of Diesel Specialists TechSmart program participant.

Course #	Course Title	Crds
3 credits from the following:		
DSET2214	Suspension and Alignment	3
DSET2218	Advanced Fuels	3
BIOL1107	Environmental Science Issues	3
COMM1120	Introduction to Public Speaking	3
CPTR1100	Fundamental Computer Concepts	1
DSET1100	Diesel Equipment Fundamentals	2
DSET1106	Fuel Systems	2
DSET1110	Power Train I	3
DSET1112	Hydraulics I	4
DSET1114	Vehicle Brakes	3
DSET1130	Trans Elec/Start/Charge	4
DSET1132	Introduction to Engine Theory	2
DSET1134	Introduction to Engines	3
DSET1144	Electrical Troubleshooting	3
DSET2204	Advanced Electrical and Emission Systems	3
DSET2206	Electronic Controls	3
DSET2210	Mobile Hydraulics	4
DSET2220	Internship	3
DSET2238	Transmissions and Drive Systems	4
DSET2242	Advanced Engines and Fuel Systems	6
ENGL1101	College Writing	3
TRNS1112	Heating Ventilation A/C	3

Drafting and 3D Technologies

Associate of Applied Science (AAS) - 66 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 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.

Course #	Course Title	Crds
CADD1000	AutoCAD Basics	3
CADD1100	Solid Modeling with AutoCAD	2
CADD1200	Introduction to SolidWorks	2
CADD1210	Introduction to Autodesk Inventor	2
COMM1120	Introduction to Public Speaking	3

ECON2210	Macroeconomics	3
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3
ENGT1118	Construction and Manufacturing Math	3
MCDD1104	Mechanical Engineering Drawing I	4
MCDD1106	Mechanical Engineering Drawing II	4
MCDD1114	Manufacturing Processes	2
MCDD1124	Mechanical Drafting Applications I	3
MCDD2112	Geometric Dimensioning and Tolerancing	2
MCDD2200	Advanced Modeling with Solidworks	3
MCDD2204	Mechanical Engineering Drawing III	4
MCDD2210	Advanced Modeling with Inventor	3
MCDD2220	Mechanical Engineering Drawing IV	3
MCDD2230	3D Printing and Prototyping	2
MCDD2246	Tool Design	3
MCDD2252	Mechanical Drafting Applications II	4
MCDD2254	Computer Numerical Control	2
SOC1111	Introduction to Sociology	3

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	Crds
	General Education	9
CADD1000	AutoCAD Basics	3
CADD1100	Solid Modeling with AutoCAD	2
CADD1200	Introduction to SolidWorks	2
CADD1210	Introduction to Autodesk Inventor	2
ENGT1118	Construction and Manufacturing Math	3
MCDD1104	Mechanical Engineering Drawing I	4
MCDD1106	Mechanical Engineering Drawing II	4
MCDD1114	Manufacturing Processes	2
MCDD1124	Mechanical Drafting Applications I	3
MCDD2112	Geometric Dimensioning and Tolerancing	2
MCDD2200	Advanced Modeling with Solidworks	3
MCDD2204	Mechanical Engineering Drawing III	4
MCDD2210	Advanced Modeling with Inventor	3
MCDD2220	Mechanical Engineering Drawing IV	3
MCDD2230	3D Printing and Prototyping	2
MCDD2246	Tool Design	3
MCDD2252	Mechanical Drafting Applications II	4
MCDD2254	Computer Numerical Control	2

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	Crds
	General Education	3
3 credits from the following:		
ELWT1122	Field Construction III	3
ELWT1132	Electrical Line Worker Internship	3
BIOL1107	Environmental Science Issues	3
ELEC1102	Introduction to Electric Circuit Theory	4
ELEC2234	Hydraulics/Pneumatics	2
ELWT1102	Electrical Line Worker Theory I	4
ELWT1104	Electrical Structure Installation	5
ELWT1106	Climbing Electrical Structure	4
ELWT1108	Construction of Overhead Structures	3
ELWT1110	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
ENST2001	Fundamentals of Utilities	4
ENST2002	Energy Safety Principles	1
ENST2222	Blueprint Reading for Energy Industry	2
ENST2223	GPS Mapping	2
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	Crds
	General Education w/MnTC Goals	3
2 credits from the following:		
ELWT1122	Field Construction III	3
ELWT1130	Electrical Line Worker Internship	2
ELWT1106	Climbing Electrical Structure	4
ELWT1118	Field Construction I	3
ELWT1110	Line Worker Theory II	4
ELWT1102	Electrical Line Worker Theory I	4
ELWT1104	Electrical Structure Installation	5
ELWT1116	Pole Top and Bucket Rescue	1
ELWT1112	Transformers	2
ELWT1120	Field Construction II	3
ELWT1108	Construction of Overhead Structures	3
ELWT1114	Line Construction Reports	2

Electrical Technology - Electrician

Diploma - 74 credits
M W

This diploma program is designed to prepare the student to build, install, maintain and repair electrical systems that provide heat, light or power for residential, commercial and industrial structures. Courses provide students with a mix of theory and hands-on application in classroom and lab settings and at job sites. This comprehensive program includes maintenance of electrical equipment, wiring methods, blueprint reading, material selection, programmable controllers and National Electric Code.

Electrical Technology-Moorhead

Course #	Course Title	Crds
	ELEC	5
	General Education	6
ELEC1100	Electrical Safety	1
ELEC1102	Introduction to Electric Circuit Theory	4

ELEC1104	Introduction to National Electrical Code	2
ELEC1107	Introduction to Residential Wiring	3
ELEC1108	Electrical Circuit Theory	4
ELEC1110	Electric Motors and Generators	4
ELEC1112	Residential Wiring	3
ELEC1114	National Electrical Code	2
ELEC1116	Conduit/Tool Applications	2
ELEC1118	Electrical Services	3
ELEC1122	Introduction to Electrical Materials	1
ELEC1124	Introduction to Electrical Blueprint Reading	2
ELEC1130	Electrical Blueprints	3
ELEC2202	Heating/Cooling Controls	3
ELEC2205	Introduction to Commercial Wiring	3
ELEC2206	Introduction to Motor Control Applications	3
ELEC2208	Programmable Logic Controllers	2
ELEC2211	Electronic Motor Control	3
ELEC2212	Commercial Wiring	3
ELEC2214	Industrial Wiring	2
ELEC2216	Motor Control Application	3
ELEC2225	Transformers	2
ELEC2248	Code Applications	2
MATH1000	Technical Mathematics	3

Electrical Technology-Wadena

Course #	Course Title	Crds
	General Education	6
	ELEC	5
ELEC1100	Electrical Safety	1
ELEC1102	Introduction to Electric Circuit Theory	4
ELEC1104	Introduction to National Electrical Code	2
ELEC1107	Introduction to Residential Wiring	3
ELEC1108	Electrical Circuit Theory	4
ELEC1110	Electric Motors and Generators	4
ELEC1112	Residential Wiring	3
ELEC1114	National Electrical Code	2
ELEC1116	Conduit/Tool Applications	2
ELEC1118	Electrical Services	3
ELEC1122	Introduction to Electrical Materials	1
ELEC1124	Introduction to Electrical Blueprint Reading	2
ELEC1130	Electrical Blueprints	3
ELEC2202	Heating/Cooling Controls	3
ELEC2205	Introduction to Commercial Wiring	3
ELEC2206	Introduction to Motor Control Applications	3
ELEC2208	Programmable Logic Controllers	2
ELEC2211	Electronic Motor Control	3
ELEC2212	Commercial Wiring	3
ELEC2214	Industrial Wiring	2
ELEC2216	Motor Control Application	3
ELEC2225	Transformers	2
ELEC2248	Code Applications	2
MATH1000	Technical Mathematics	3

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)

Course #	Course Title	Crds
	General Education w/MnTC Goals	9
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
CHEM1111	General Inorganic Chemistry I	5
CHEM1112	General Inorganic Chemistry II	5
COMM1120	Introduction to Public Speaking	3
ENGL1101	College Writing	3
ENGR2210	Engineering Mechanics I	3
ENGR2220	Engineering Mechanics II	3
ENGR2230	Mechanics of Materials	3
MATH1134	Calculus I	5
MATH1135	Calculus II	5
MATH2231	Calculus III	4
MATH2259	Differential Equations	4
PHYS1412	University Physics II	5

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.

Course #	Course Title	Crds
CONM2213	Safety Management	2
GAS1000	Gas Utility Field Training I	4
GAS1001	Underground Utility Locating	2
GAS1003	Gas Utility Equipment Training	5
GAS1004	Gas Utility Field Training II	4
GAS2002	Gas Utility Field Training III	5
GAS2003	Gasless Leak Detection	3
GAS2600	Electric and Gas Appliances	4
MATH1000	Technical Mathematics	3

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.

Course #	Course Title	Crds
HVAC1102	Duct Fitting Construction	3
HVAC1103	Electricity for Heating, Ventilating and Air Conditioning	4
HVAC1104	Heating, Ventilating, and Air Conditioning Electrical Controls	3
HVAC1128	Heating, Ventilating, and Air Conditioning Design and Installation	5
HVAC1224	Gas and Oil Heating	3
HVAC2202	Air Handling	2
HVAC2212	Hot Water Heating	3
HVAC2221	Heat Pump Theory and Operation	3
HVAC2290	Heating, Ventilating, and Air Conditioning Internship	1
MATH1000	Technical Mathematics	3
REFR1110	Refrigeration, Air Conditioning and Heating Principles	3
REFR1112	Refrigeration, Air Conditioning and Heating Lab	3

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	Crds
3 credits from the following:		
COMM1100	Power and Communications in Human Relations	3
COMM1130	Small Group Communication	3
COMM2230	Intercultural Communication	3
9 credits from the following:		
BUS1120	Spreadsheet and Database Concepts	3
CADD1102	Fundamentals of CADD	4
CHEM1100	Fundamental Concepts of Chemistry	3
CPTR1104	Introduction to Computer Technology	3
ENGR1100	Project Management	1
IHS1293	OSHA 10-Hour General Industry Safety	1
IHS2292	OSHA 30-Hour General Industry Safety	2
IMMA1110	Introduction to Power and Mechanical Systems	3
IMMA1112	Mechanical Blueprint Reading	2
IND1160	Food Manufacturing Science	3
IND1501	Basic Steel Welding	4
METC1118		
METC2270		
OPT1100	Introduction to Fiber Optics	3
PHIL1201	Ethics	3
IND1110	Introduction to the Industrial Workplace	3
MATH1000	Technical Mathematics	3

Marine Engine Technology

Associate of Applied Science (AAS) - 69 credits
D

The Marine Engine Technology AAS is designed to train individuals to be competent marine technicians with the skills needed for management and manufacturer technical positions. The primary focus of the program is the diagnosis, service and repair of outboard and stern-drive engines, with the understanding that graduates may need to explain these various systems to customers. Our students perform services on modern marine products using special tools and test equipment. Along with taking factory certification exams, students learn how to plan and perform repairs according to various manufacturers' recommended procedures. This program is designed for individuals who are looking toward a goal of management, technical manufacturer service or business ownership.

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
	POLS	3
	ENGL	3
	PSYC	3
MRNT1107	Drive Systems I	3
MRNT1114	Introduction to Boat Rigging	2
MRNT2001	Marine Internship	1
MRNT2107	Drive Systems II	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	3
MRNT2223	Advanced Drives	3
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
TRNS1003	Off-Road Literature and Computer Systems	2
TRNS1005	Off-Road Electrical Systems	2
TRNS1006	Off-Road Vehicle Maintenance	4
TRNS1015	Ignition, Charging and Starter Systems Lab	2
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

Marine Engine 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-rounded 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	Crds
	General Education w/MnTC Goals	3
MRNT1104	Drive System Theory	3
MRNT1105	Introduction to Marine	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

Diploma - 60 credits
D

The Marine Engine Technology diploma program is designed to train individuals to be competent marine technicians. The primary focus of this program is the diagnosis, service and repair of outboard, stern drive and inboard engines. Propulsion, electrical and trailer systems also will be 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	Crds
	General Education w/MnTC Goals	6
MRNT1107	Drive Systems I	3
MRNT1114	Introduction to Boat Rigging	2
MRNT2001	Marine Internship	1
MRNT2107	Drive Systems II	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	3
MRNT2223	Advanced Drives	3
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
TRNS1003	Off-Road Literature and Computer Systems	2
TRNS1005	Off-Road Electrical Systems	2
TRNS1006	Off-Road Vehicle Maintenance	4
TRNS1015	Ignition, Charging and Starter Systems Lab	2
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

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.

Course #	Course Title	Crds
TRNS1001	Fuel Systems I	3
TRNS1003	Off-Road Literature and Computer Systems	2
TRNS1005	Off-Road Electrical Systems	2
TRNS1006	Off-Road Vehicle Maintenance	4
TRNS1102	Introduction to Transportation	2
TRNS1104	Transportation Electronics	3

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.

Course #	Course Title	Crds
PHIL1200	Applied and Professional Ethics	3
PLBG1101	Piping and Job Safety	2
PLBG1103	Plumbing Trade Tools	2
PLBG1115	Faucets and Fixtures	2
PLBG1119	Materials and Fittings	4
PLBG1123	Plumbing Code I	3
PLBG1125	Plumbing Lab I	2
PLBG1131	Grade and Elevation	2
PLBG1133	Blueprint Reading	2
PLBG1135	Drainage, Waste and Venting	4
PLBG1137	Water Distribution	3
PLBG1139	Backflow Basics	2
PLBG1141	Plumbing Code II	3
PLBG1145	Plumbing Lab II	2

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
PWST1302	Snowmobile I	5
TRNS1001	Fuel Systems I	3
TRNS1003	Off-Road Literature and Computer Systems	2
TRNS1005	Off-Road Electrical Systems	2
TRNS1006	Off-Road Vehicle Maintenance	4
TRNS1015	Ignition, Charging and Starter Systems Lab	2
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

PowerSports Technology

Diploma - 60 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 a 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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
MRNT2233	Engine Performance Rebuild and Diagnostics	4
PWST1302	Snowmobile I	5
PWST1304	Snowmobile Clutching	2
PWST1406	Chainsaws and Generators	2
PWST2302	Advanced Power Equipment	4
PWST2304	Motorcycles I	3
PWST2306	Snowmobile Drives and Suspensions	3
PWST2308	Advanced Snowmobiles	3
PWST2311	Motorcycles II	3
PWST2312	Advanced Motorcycle Systems	3
TRNS1001	Fuel Systems I	3
TRNS1003	Off-Road Literature and Computer Systems	2
TRNS1005	Off-Road Electrical Systems	2
TRNS1006	Off-Road Vehicle Maintenance	4
TRNS1015	Ignition, Charging and Starter Systems Lab	2
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

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.

Course #	Course Title	Crds
CADD1000	AutoCAD Basics	3
CIVL1100	Survey I: Fundamentals of Surveying	3
CIVL1119	Survey II: Land Surveys	3
CIVL1138	CADD II: Plan Layout	3
CIVL2209	Construction Inspection	3
CIVL2210	Road Design	3
ENGL1101	College Writing	3
ENGT1118	Construction and Manufacturing Math	3
ENGT1126	Engineering Graphics	3
ENGT1134	Office Systems and Equipment	3

NOTES

Health Science Technology

+ Not offered academic year 2017-2018

Learn more at minnesota.edu

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Minnesota State
Community and Technical College

Biological Sciences

Associate of Science (AS) - 60 credits
F M

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 adviser. A visit to the intended transfer institution by the spring of the first year is highly recommended.

Course #	Course Title	Crds
	General Education w/MnTC Goals	16
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
BIOL1122	General Biology I	4
BIOL1123	General Biology II	4
BIOL2240	Genetics	4
CHEM1111	General Inorganic Chemistry I	5
CHEM1112	General Inorganic Chemistry II	5
ENGL1101	College Writing	3
MATH1114	College Algebra	4
MATH1115	Functions/Trigonometry	4
PHYS1401	College Physics I	4
PHYS1402	College Physics II	4

Biological Sciences - Associate in Science (AS)
Ecology and Evolutionary Biology Emphasis

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
BIOL1122	General Biology I	4
BIOL1123	General Biology II	4
BIOL2010	General Ecology	4
BIOL2220	General Microbiology	4
BIOL2240	Genetics	4
CHEM1111	General Inorganic Chemistry I	5
CHEM1112	General Inorganic Chemistry II	5
COMM1120	Introduction to Public Speaking	3
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3
MATH1114	College Algebra	4
MATH1116	College Trigonometry	3
PHYS1401	College Physics I	4
PHYS1402	College Physics II	4
PSYC1200	General Psychology	3

Biology Transfer Pathway

Associate of Science (AS) - 60 credits
F M

The Biology 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 Biology 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.

Course #	Course Title	Crds
	MnTC Goal Areas	21
4 credits from the following:		
BIOL2010	General Ecology	4
BIOL2220	General Microbiology	4
3 credits from the following:		
MATH1115	Functions/Trigonometry	3
MATH1116	College Trigonometry	3
MATH1122	Applied Calculus and Linear Algebra 3	
MATH1134	Calculus I	3
MATH1135	Calculus II	3
MATH1213	Introduction to Statistics	3
BIOL1122	General Biology I	4
BIOL1123	General Biology II	4
BIOL2240	Genetics	4
CHEM1111	General Inorganic Chemistry I	5
CHEM1112	General Inorganic Chemistry II	5
COMM1120	Introduction to Public Speaking	3
ENGL1101	College Writing	3
MATH1114	College Algebra	4

Cardiovascular Technology - Invasive

Associate of Applied Science (AAS) - 60 credits
M

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.

Fall Start

Course #	Course Title	Crds
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
BIOL2267	Medical Microbiology	3
BIOL2268	Medical Microbiology Lab	1
COMM1130	Small Group Communication	3
CVRI1100	Cardiovascular Technology Survey	2
CVRI1105	Introduction to Cardiovascular Technology	2
CVRI1110	Cardiovascular Anatomy and Physiology	3
CVRI1120	Principles of Patient Care	4
CVRI1130	Cardiovascular Technology I	3
CVRI1136	Cardiovascular Technology Clinical	2
CVRI2130	Cardiovascular Technology II	5
CVRI2141	Pharmacology for Cardiovascular Technology	2
CVRI2145	Intravenous Therapy	1
CVRI2250	Radiation Safety	2
CVRI2262	Cardiovascular Technology Practicum I	5
CVRI2263	Cardiovascular Technology Practicum II	5
CVRI2264	Cardiovascular Technology Practicum III	5
MATH1114	College Algebra	4

Chemistry

Associate of Science (AS) - 60 credits
F M

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	17
4 credits from the following:		
MATH1135	Calculus II	5
MATH1213	Introduction to Statistics	4
4 credits from the following:		
PHYS1402	College Physics II	4
PHYS1412	University Physics II	5

4 credits from the following:

PHYS1401	College Physics I	4
PHYS1411	University Physics I	5
CHEM1111	General Inorganic Chemistry I	5
CHEM1112	General Inorganic Chemistry II	5
CHEM2224	Organic Chemistry I	5
CHEM2225	Organic Chemistry II	5
ENGL1101	College Writing	3
ENGL1205	Writing About Literature	3
MATH1134	Calculus I	5

Dental Assisting

Associate of Applied Science (AAS) - 63 credits
M

The Dental Assisting program provides the knowledge necessary for the dental assistant to assist in performing general clinical assisting and support functions, intraoral clinical procedures, business office procedures and laboratory tasks. The curriculum includes content in general studies; biomedical, dental and clinical sciences; clinical practice; and additional intraoral 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.

Course #	Course Title	Crds
BIOL2202	Principles of Nutrition	3
BIOL2260	Human Anatomy and Physiology I	3
BIOL2262	Human Anatomy and Physiology II	3
BIOL2267	Medical Microbiology	3
CHEM1100	Fundamental Concepts of Chemistry	3
DENT1100	Biomaterials	3
DENT1102	Dental Anatomy	2
DENT1103	Introduction for Dental Health Care Providers	2
DENT1104	Dental Health Care Providers II	1
DENT1106	Dental Radiology Lecture	3
DENT1122	Dental Ethics and Jurisprudence	1
DNAS1103	Clinical Assisting I	6
DNAS1105	Clinical Assisting II	5
DNAS1106	Biodental Science	3
DNAS1114	Dental Practice Management	2
DNAS1119	Advanced Functions	5
DNAS1144	Dental Assisting Clinical Affiliations	6
DNAS1210	Radiology Lab	1
DNAS1212	Radiology Lab II	1
DNAS1215	Dental Specialties	1
ENGL1101	College Writing	3
PSYC1200	General Psychology	3

Dental Assisting

Diploma - 48 credits
M

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.

Course #	Course Title	Crds
BIOL2260	Human Anatomy and Physiology I	3
DENT1100	Biomaterials	3
DENT1102	Dental Anatomy	2
DENT1103	Introduction for Dental Health Care Providers	2
DENT1104	Dental Health Care Providers II	1
DENT1106	Dental Radiology Lecture	3
DENT1122	Dental Ethics and Jurisprudence	1
DNAS1103	Clinical Assisting I	6
DNAS1105	Clinical Assisting II	5
DNAS1106	Biodental Science	3
DNAS1114	Dental Practice Management	2
DNAS1119	Advanced Functions	5
DNAS1144	Dental Assisting Clinical Affiliations	6
DNAS1210	Radiology Lab	1
DNAS1212	Radiology Lab II	1
DNAS1215	Dental Specialties	1
ENGL1101	College Writing	3

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.

Course #	Course Title	Crds
BIOL2202	Principles of Nutrition	3
BIOL2260	Human Anatomy and Physiology I	3
BIOL2262	Human Anatomy and Physiology II	3
BIOL2267	Medical Microbiology	3
CHEM1100	Fundamental Concepts of Chemistry	3
DENT1100	Biomaterials	3
DENT1102	Dental Anatomy	2
DENT1103	Introduction for Dental Health Care Providers	2
DENT1104	Dental Health Care Providers II	1
DENT1106	Dental Radiology Lecture	3
DENT1122	Dental Ethics and Jurisprudence	1
DNHY1104	Dental Anatomy Lab	1
DNHY1106	Head and Neck Anatomy	2
DNHY1108	Dental Embryology and Histology	2
DNHY1109	Dental Radiology Lab	2
DNHY1110	Principles I	2
DNHY1112	Dental Hygiene Practice I	3
DNHY1118	Oral Pathology	2
DNHY1119	Dental Hygiene Principles II	4
DNHY1123	Dental Hygiene Practice II	5
DNHY1124	Pain Control Lab	2
DNHY1130	Dental Hygiene Principle III	1
DNHY1132	Dental Hygiene Practice III	1
DNHY1136	Dental Pharmacology	2
DNHY2210	Dental Hygiene Principle IV	2
DNHY2213	Dental Hygiene Practice IV	6
DNHY2219	Periodontology	2
DNHY2220	Dental Hygiene Principle V	1
DNHY2223	Dental Hygiene Practice V	6
DNHY2226	Community Dental Hygiene	4
DNHY2240	Clinical Affiliation I	1
DNHY2246	Clinical Affiliation II	1
ENGL1101	College Writing	3
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
COMM1140	Interpersonal Communication	3
BIOL2260	Human Anatomy and Physiology I	3
BIOL2262	Human Anatomy and Physiology II	3
CPTR1104	Introduction to Computer Technology	3
ENGL1101	College Writing	3
HITM1150	Introduction to Health Care Delivery	3
HITM1152	Health Information Systems	3
HITM1155	Medicolegal Aspects	3
HITM1159	Professional Practice Experience Functions	2
HITM2204	Fundamentals of Electronic Health Records	3
HITM2216	Introduction to Procedure Coding	3
HITM2218	Intermediate Procedure Coding	3
HITM2230	Medical Science for Health Information Professionals	3
HITM2250	Supervisory Leadership in Health	3
HITM2253	Quality Management Studies	3
HITM2263	Reimbursement Systems	3
HITM2272	Professional Practice Experience Coding	2
HITM2282	Introduction to Diagnosis Coding	3
HITM2283	Intermediate Diagnosis Coding	3
HITM2290	Health Care Data Management and Analysis	3
HLTH1116	Medical Terminology	3

Medical Administrative Assistant

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

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	9
ADMM1110	Medical Documentation Fundamentals	4
ADMM1122	Medical Office Procedures	4
ADMM1140	Medical Language Applications	3
ADMM1150	Medical Billing/Insurance	4
ADMM1152	Outpatient Coding	4
ADMM1160	Beginning Medical Transcription	3
ADMM1200	Medical Office Technology Tools	2
ADMM2122	Medical Office Management	3
ADMM2130	Medical Office Career Insight	2
ADMM2150	Medicare Coding and Billing Applications	3
ADMM2320	Medical Office Capstone	1
ADMS1116	Business Communications I	3
ENGL1101	College Writing	3
HLTH1110	Introduction to Anatomy and Physiology	3
HLTH1116	Medical Terminology	3
HLTH2208	Pathophysiology	3
PSYC2222	Lifespan Development	3

Medical Coding and Insurance

Diploma - 50 credits
M O

The Medical Coding and Insurance diploma program prepares students in many of the procedures associated with billing for medical services. Students receive training in medical billing processes including patient account management, diagnosis and procedure coding, and medical insurance claim completion and processing. The program focuses on coding and insurance procedures for the medical office. Medical coding involves using nationally recognized coding systems to classify procedures and diagnoses related to medical treatment. The codes provide information that is used in insurance claims processing. Many different types of insurance programs are handled in the medical office. Students are trained in claims processes of many insurance programs/plans such as Medicare, Medicaid, Tricare, profit and nonprofit third-party payers, workers compensation packages and disability coverage. Graduates of the program may be eligible to take several of the national coding certification exams. Courses in the program incorporate the skills needed for employment in the coding and insurance departments of medical facilities.

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
ADMM1110	Medical Documentation Fundamentals	4
ADMM1122	Medical Office Procedures	4
ADMM1140	Medical Language Applications	3
ADMM1150	Medical Billing/Insurance	4
ADMM1152	Outpatient Coding	4
ADMM1200	Medical Office Technology Tools	2
ADMM2130	Medical Office Career Insight	2
ADMM2150	Medicare Coding and Billing Applications	3
ADMM2152	Advanced Coding	4
ADMM2154	Hospital Billing	2
ADMM2256	Certified Professional Biller Examination	1
ADMM2258	Certified Professional Coder Examination Review	1
ADMM2320	Medical Office Capstone	1
ENGL1101	College Writing	3
HLTH1110	Introduction to Anatomy and Physiology	3
HLTH1116	Medical Terminology	3
HLTH2208	Pathophysiology	3

Medical Laboratory Technology

Associate of Science (AS) - 60 credits
F

to work in a clinical laboratory. These techniques emphasize skills in phlebotomy, body fluid analysis, hematology, chemistry, microbiology, immunology and immunohematology. Students learn to correlate test results with patients' conditions. In addition, students earn credits in general education, including anatomy and physiology, communications, chemistry and the humanities. Program courses are offered in a hybrid format (lectures and lab instruction arranged). After successful completion of didactic courses, students enters a clinical experience at an affiliate health care laboratory performing laboratory testing under supervision. Graduates of the MLT program are eligible to take the examination given by the Board of Certification of the American Society for Clinical Pathology. Graduates may articulate to a four-year institution to receive a bachelor of science degree in medical laboratory science. The MLT program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
	Ethical and Civic Responsibility	3
3 credits from the following:		
CHEM1100	Fundamental Concepts of Chemistry	3
CHEM1101	Principles of General Chemistry	4
CHEM1111	General Inorganic Chemistry I	5
3 credits from the following:		
ENGL1205	Writing About Literature	3
ENGL1210	Writing About Current Issues	3
ENGL1215	Professional and Technical Writing	3
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
BIOL2265	Diagnostic Microbiology	4
ENGL1101	College Writing	3
MLT1110	Phlebotomy Skills	2
MLT1115	Basic Laboratory Techniques	2
MLT1123	Immunohematology	4
MLT1215	Hematology	3
MLT1225	Biological Fluids	2
MLT2130	Diagnostic Chemistry	4
MLT2218	Clinical Urinalysis	1
MLT2220	Clinical Blood Bank	2
MLT2222	Clinical Chemistry	2
MLT2225	Clinical Hematology	2
MLT2226	Clinical Microbiology	2
MLT2315	Immunology	2
MLT2345	Clinical Applications	2

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
ADMM1110	Medical Documentation Fundamentals	4
ADMM1122	Medical Office Procedures	4
ADMM1140	Medical Language Applications	3
ADMM1150	Medical Billing/Insurance	4
ADMM1152	Outpatient Coding	4
ADMM1160	Beginning Medical Transcription	3
ADMM1200	Medical Office Technology Tools	2
ADMM2130	Medical Office Career Insight	2
ADMS1116	Business Communications I	3
ENGL1101	College Writing	3
HLTH1110	Introduction to Anatomy and Physiology	3
HLTH1116	Medical Terminology	3
HLTH2208	Pathophysiology	3

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.

Course #	Course Title	Crds
ADMM1110	Medical Documentation Fundamentals	4
ADMM1122	Medical Office Procedures	4
ADMM1140	Medical Language Applications	3
ADMM1150	Medical Billing/Insurance	4
ADMM1200	Medical Office Technology Tools	2
ADMM2130	Medical Office Career Insight	2
ADMS1116	Business Communications I	3
ENGL1101	College Writing	3
HLTH1110	Introduction to Anatomy and Physiology	3
HLTH1116	Medical Terminology	3
HLTH2208	Pathophysiology	3

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.

Course #	Course Title	Crds
	Career	1
ADMM1110	Medical Documentation Fundamentals	4
ADMM1140	Medical Language Applications	3
ADMM1160	Beginning Medical Transcription	3
ADMM1162	Intermediate Medical Transcription	3
ADMM1200	Medical Office Technology Tools	2
ADMM2130	Medical Office Career Insight	2
ADMM2235	RMT Exam Review	1
ADMM2268	Advanced Medical Transcription	3
ADMM2272	Medical Transcription Practicum	3
ADMS1116	Business Communications I	3
ENGL1101	College Writing	3
HLTH1110	Introduction to Anatomy and Physiology	3
HLTH1116	Medical Terminology	3
HLTH2208	Pathophysiology	3

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.

Course #	Course Title	Crds
4 credits from the following:		
	HLTH1201 Introduction to Mental Health Behavioral Aide	4
	PSYC1201 Introduction to Mental Health Behavioral Aide	4
MCS2230	Multicultural America	3
PSYC2220	Abnormal Psychology	3
PSYC2222	Lifespan Development	3
PSYC2226	Behavior and Environmental Management	3

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 Generic 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 Licensing 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

Course #	Course Title	Crds
	General Education	3
BIOL2202	Principles of Nutrition	3
NURS2410	Role Transition	2
NURS2426	Reproductive Disorders	2
NURS2437	Nursing Clinical II	4
NURS2438	Restorative Nursing I	4
NURS2447	Nursing Clinical III	4
NURS2448	Restorative Nursing II	3
NURS2455	Advanced Intravenous Therapy	1
NURS2464	Nursing Leadership	1
NURS2466	Mental Health Nursing	2
SOC1111	Introduction to Sociology	3

Advanced Standing Option-Spring Start

Course #	Course Title	Crds
	General Education	3
BIOL2202	Principles of Nutrition	3
NURS2410	Role Transition	2
NURS2426	Reproductive Disorders	2
NURS2437	Nursing Clinical II	4
NURS2438	Restorative Nursing I	4
NURS2447	Nursing Clinical III	4
NURS2448	Restorative Nursing II	3
NURS2455	Advanced Intravenous Therapy	1
NURS2464	Nursing Leadership	1
NURS2466	Mental Health Nursing	2
SOC1111	Introduction to Sociology	3

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 graduating 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 Licensing 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.

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

Course #	Course Title	Crds
	General Education	3
BIOL2202	Principles of Nutrition	3
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
BIOL2267	Medical Microbiology	3
BIOL2268	Medical Microbiology Lab	1
CHEM1100	Fundamental Concepts of Chemistry	3
ENGL1101	College Writing	3
NURS1400	Introduction to Professional Nursing	2
NURS1406	Nursing Fundamentals I	3
NURS1415	Nursing Clinical I	2
NURS1416	Nursing Fundamentals II	4
NURS1426	Reproductive Health	2
NURS2426	Reproductive Disorders	2
NURS2437	Nursing Clinical II	4
NURS2438	Restorative Nursing I	4
NURS2447	Nursing Clinical III	4
NURS2448	Restorative Nursing II	3
NURS2455	Advanced Intravenous Therapy	1
NURS2464	Nursing Leadership	1
NURS2466	Mental Health Nursing	2
PSYC2222	Lifespan Development	3
SOC1111	Introduction to Sociology	3

Nursing - (Generic Option) - Associate in Science (AS) on the FF and Wadena campuses

Course #	Course Title	Crds
	General Education	3
BIOL2202	Principles of Nutrition	3
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
BIOL2267	Medical Microbiology	3
BIOL2268	Medical Microbiology Lab	1
CHEM1100	Fundamental Concepts of Chemistry	3
ENGL1101	College Writing	3
NURS1400	Introduction to Professional Nursing	2
NURS1406	Nursing Fundamentals I	3
NURS1415	Nursing Clinical I	2
NURS1416	Nursing Fundamentals II	4
NURS1426	Reproductive Health	2
NURS2426	Reproductive Disorders	2
NURS2437	Nursing Clinical II	4
NURS2438	Restorative Nursing I	4
NURS2447	Nursing Clinical III	4
NURS2448	Restorative Nursing II	3
NURS2455	Advanced Intravenous Therapy	1
NURS2464	Nursing Leadership	1
NURS2466	Mental Health Nursing	2
PSYC2222	Lifespan Development	3
SOC1111	Introduction to Sociology	3

Pharmacy Technology

Associate of Applied Science (AAS) - 60 credits
O

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	3
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1130	Small Group Communication	3
COMM1140	Interpersonal Communication	3
3 credits from the following:		
MATH1100	World of Math	3
MATH1102	Finite Math	3
MATH1114	College Algebra	4
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
BIOL2267	Medical Microbiology	3
BIOL2268	Medical Microbiology Lab	1
CHEM1100	Fundamental Concepts of Chemistry	3
CPTR1104	Introduction to Computer Technology	3
ENGL1101	College Writing	3
HLTH1116	Medical Terminology	3
PHRM1001	Fundamental Concepts of Pharmacy	3
PHRM2001	Pharmacy Principles and Practices I	4
PHRM2002	Pharmacy Principles and Practices II	5
PHRM2004	Drug Properties/Distribution	3
PHRM2010	Experiential / Hospital	3
PHRM2012	Experiential / Retail	3
PSYC1200	General Psychology	3
SOC1111	Introduction to Sociology	3

Pharmacy Technology

Diploma - 36 credits
O

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.

Course #	Course Title	Crds
CHEM1100	Fundamental Concepts of Chemistry	3
CPTR1104	Introduction to Computer Technology	3
ENGL1101	College Writing	3
HLTH1110	Introduction to Anatomy and Physiology	3
HLTH1116	Medical Terminology	3
PHRM1001	Fundamental Concepts of Pharmacy	3
PHRM2001	Pharmacy Principles and Practices I	4
PHRM2002	Pharmacy Principles and Practices II	5
PHRM2004	Drug Properties/Distribution	3
PHRM2010	Experiential / Hospital	3
PHRM2012	Experiential / Retail	3

Phlebotomy Technician

Certificate - 16 credits
F

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.

Course #	Course Title	Crds
	Special requirement : Communication	3
HLTH1110	Introduction to Anatomy and Physiology	3
HLTH1116	Medical Terminology	3
MLT1110	Phlebotomy Skills	2
MLT1112	Clinical Phlebotomy	3
MLT1115	Basic Laboratory Techniques	2

Practical Nursing

Diploma - 40 credits
D F M W

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 Licensing 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.

Course #	Course Title	Crds
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
ENGL1101	College Writing	3
PNSG1508	Foundations of Adult Nursing Care I	8
PNSG1514	Clinical I Practical Nurse Foundations	4
PNSG1518	Foundations of Adult Nursing Care II	5
PNSG1520	Nursing Care of Women, Newborns, and Children	2
PNSG1522	Transition to Practical Nursing Practice	1
PNSG1524	Practical Nursing Mental Health	2
PNSG1528	Clinical II Practical Nursing	4
PSYC2222	Lifespan Development	3

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, evaluates the quality of finished radiographs and carries out activities associated with quality control. The student radiologic technologist carries out these functions under the supervision or upon the direction 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. 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. **eCampus students - Please note, incorporated into the eCampus program are on-campus lab and on-site clinical requirements. The amount of days required will vary by course outcomes and individual instructor.**

Course #	Course Title	Crds
BIOL2260	Human Anatomy and Physiology I	3
BIOL2262	Human Anatomy and Physiology II	3
COMM1140	Interpersonal Communication	3
MATH1114	College Algebra	4
PHYS1105	Fundamental Concepts in Physics	3
RADT1102	Fundamental Concepts of Radiologic Technology	2
RADT1112	Introduction to Radiologic Technology and Patient Care	4
RADT1116	Radiographic Procedures I	5
RADT1124	Radiographic Procedures II	4
RADT1132	Principles of Radiobiology	4
RADT1140	Radiographic Imaging	4
RADT1146	Radiographic Procedures III	4
RADT1180	Radiographic Clinical I	5
RADT1190	Radiographic Clinical II	5
RADT2100	Radiographic Clinical III	5
RADT2110	Radiographic Clinical IV	5
RADT2120	Radiographic Clinical V	5
RADT2130	Radiographic Clinical VI	5
RADT2224	Imaging Equipment	4
RADT2280	Radiologic Technology Registry Review	2

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.

Course #	Course Title	Crds
	Special requirements Program Pre-requisites: American Heart Association Health Care Provider CPR MDH Background Check National Background Check Developmental Education with C or better Health Form/Immunization ... Eligibility Criteria: GPA 2.0 or higher or a C in required courses ...Test out or pass with a "C" or better Math 1020	
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
BIOL2267	Medical Microbiology	3
BIOL2268	Medical Microbiology Lab	1
ENGL1101	College Writing	3
HLTH1116	Medical Terminology	3
HLTH2208	Pathophysiology	3
PHIL1200	Applied and Professional Ethics	3
PSYC2222	Lifespan Development	3
SURT1210	Surgical Technology I	6
SURT1215	Surgical Pharmacology	3
SURT1220	Surgical Technology II	5
SURT1230	Surgical Technology III	4
SURT1250	Surgical Clinical I	6
SURT1255	Surgical Clinical II	6

Human Services

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Child Care and Education Certificate 100

Correctional Officer Certificate.....100

Cosmetology Diploma 100

North Dakota Licensure Certificate 100

Criminal Justice AS.....100

Early Childhood and
Paraprofessional Education 101

Esthetist Certificate 101

Fire Service Preparation Certificate.....101

Manicurist Certificate 101

Massage Therapy Diploma 101

Paralegal AAS.....102

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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.

Course #	Course Title	Crds
CDEV1105	Development/Guidance	3
CDEV1107	Introduction to Early Education	3
CDEV2200	Integrating Play	3
CDEV2229	Imaginative Learning	3
CDEV2236	Occupational Experience	1
CDEV2244	Parent Professional Relations	3
CDEV2246	Foundations in Literacy	3
CPTR1104	Introduction to Computer Technology	3
HLTH1122	CPR-First Aid	1
PDEV1102	Contemporary Career Search	1

Correctional Officer

Certificate - 25 credits
M

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 AS degree for peace officer licensing.

Course #	Course Title	Crds
ACCT1012	Principles of Bookkeeping	3
CPTR1100	Fundamental Computer Concepts	1
CRJU1101	Introduction to Criminal Justice	3
CRJU1108	Physical Control Tactics for Corrections	3
CRJU1109	Law Enforcement Behavioral Science	3
CRJU2201	Criminal Law	3
CRJU2206	Police Report Writing	3
ENGL1101	College Writing	3
SOC2216	Minority Group Relations	3

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.)

Course #	Course Title	Crds
	General Education w/MnTC Goals	6
33 credits from the following:		
COSM1000	Principles and Practices	3
COSM1185		
COSM1200	Salon Practicum	1 - 18
COSM2700	Nail Art	1
COSM2800	Alexandria Body Sugaring	1
ESTH1801	Advanced Skin Treatments	1
COSM1117	Shampooing and Rinsing	1
COSM1119	Haircutting	1
COSM1129	Hairstyling	1
COSM1130	Properties of the Hair and Scalp	1
COSM1157	Histology of the Skin	1
COSM1159	Facials, Make-Up, and Hair Removal	1
COSM1161	Nail Structure and Growth	1
COSM1163	Hair Color	1
COSM1171	Principles of Hair Design	1
COSM1173	Chemistry and Electricity	1
COSM1177	Infection Control	1
COSM1179	Minnesota Cosmetology Laws and Rules	1
COSM2000	Artistry in Hairstyling	1
COSM2100	Chemical Texture Services	1
COSM2200	Manicuring/Pedicuring	1
COSM2300	Anatomy of the Head, Face & Neck	1
COSM2400	Advanced Nail Techniques	1
COSM2500	Salon Business	1
COSM2600	Professional Image	1

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.

Course #	Course Title	Crds
COSM1153	North Dakota Laws and Rules	1
COSM1200	Salon Practicum	8

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.

Course #	Course Title	Crds
	General Education w/MnTC Goals	21
	CRJU	6
COMM1140	Interpersonal Communication	3
CRJU1101	Introduction to Criminal Justice	3
CRJU1102	Policing and Practices	3
CRJU1104	Juvenile Justice and Delinquency	3
CRJU1109	Law Enforcement Behavioral Science	3
CRJU2201	Criminal Law	3
CRJU2202	Criminal Procedures	3
CRJU2206	Police Report Writing	3
CRJU2209	Criminal Investigations	3
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3

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	Crds
	General Education w/MnTC Goals	12
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	1
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
CDEV2290	Internship	3
COMM1120	Introduction to Public Speaking	3
ENGL1101	College Writing	3
ENGL1215	Professional and Technical Writing	3
PSYC1200	General Psychology	3
SOC1111	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	Crds
15 credits from the following:		
COSM1200	Salon Practicum	1 - 18
COSM2800	Alexandria Body Sugaring	1
ESTH1808		
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

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	Crds
3 credits from the following:		
COMM1120	Introduction to Public Speaking	3
COMM1140	Interpersonal Communication	3
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	Crds
	COSM	8
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

Massage Therapy

Diploma - 34 credits
W

Massage therapists specialize in professional massage treatments designed to support the health and well-being of clients. Skillful 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	Crds
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
HLTH1100	Introduction to Nutrition	2
THPY1110	Massage Techniques and Ethics	3
THPY1118	Kinesiology	3
THPY1123	Integrative Massage	2
THPY1130	Advanced Massage	2
THPY1135	Deep Tissue Massage	2
THPY1142	Practical Skills Clinic	3
THPY1146	Certification Preparation	2
THPY1148	Sports Massage and Hydrotherapy	2
THPY1150	Business Development	2
THPY1156	Massage Pathophysiology	3

Paralegal

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

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	Crds
	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
CPTR1104	Introduction to Computer Technology	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

NOTES

Course Descriptions

+ Not offered academic year 2017-2018

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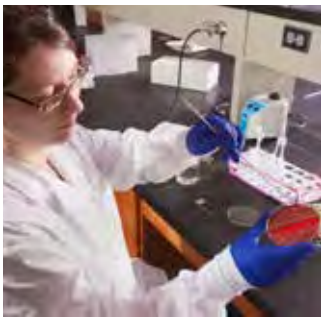

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Course #	CourseTitle	CR	Lec/Lab/OJT

ACCT 1000 Business Math 2 2/0/0
This course covers commonly occurring business-related calculations and their application to accounting and other business functions.
Prerequisite: 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 1124 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.
Prerequisite: CPTR1104
Corequisite: None

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: None
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: None
Corequisite: ACCT2212

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 CSCI1155 OR ACCT2211 AND CSCI1155
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 content will include adjustments and error correction, payroll and deprecation, 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: ACCT2620
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
NoneThis 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,

managerial accounting, business law and taxation.
Prerequisite: ACCT1101 AND ACCT1120 AND ACCT2213 AND ACCT2255 AND ACCT2620
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 and 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. Whether in a small private practice or a large group practice, 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 the medical administrative professional. 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 health care employers.
Prerequisite: ADMM1122 OR ADMM1160
Corequisite: None

ADMM 2150 Medicare 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 2256 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: ADMM1150
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: ADMM2252
Corequisite: None

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

Course #	CourseTitle	CR	Lec/Lab/OJT

ADMM 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 health care 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 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. 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: 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 alphabetic, 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. Student 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

ADMS 1162 Introduction Desktop Publishing 1 0/1/0
This course introduces the concepts, terminology, techniques and applications of desktop publishing software.
Prerequisite: None
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.
Prerequisite: None
Corequisite: None

ADMS 1190 Keyboarding II 1 0/1/0
This course covers advanced formatting and text editing techniques that focus on developing enhanced proofreading, editing and revising 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.
Prerequisite: ADMS1100
Corequisite: ADMS1100

ADMS 1210 Spreadsheet Essentials 2 1/1/0
This course will provide students who use Excel but have limited experience and skills with the opportunity 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.
Prerequisite: None
Corequisite: 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, organization and project management. Students will be required to accept higher-level responsibilities, tasks and projects as assigned per the site supervisor or faculty member.
Prerequisite: ADMS1142
Corequisite: 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 also will use technology creatively, effectively and efficiently with integrity. Students will develop the traits 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.
Prerequisite: None
Corequisite: None

ADMS 2124 Emerging Office Technologies 3 2/1/0
This course introduces the student to emerging office technologies and tasks that increase work quality and productivity in changing office environments. Topics include voice recognition, digital transcription, cloud computing (including securing information), editing PDF files and accessing information through the Internet. This course also provides students with a 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 competitive advantage.
Prerequisite: None
Corequisite: 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 the computer production of a variety of business documents while working with more complicated projects that incorporate many of the upper-level skills required at this level.
Prerequisite: ADMS1110
Corequisite: 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 as required and experienced in the office setting.
Prerequisite: C or higher in ADMS1130 OR per instructor's approval
Corequisite: None

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, effectively and ethically. Students will use analytical, decision making and technology skills for collaborative and individually written documents and presentations.
Prerequisite: C or higher in ADMS1116 OR per instructor's approval
Corequisite: None

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 with each 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,
Prerequisite: per instructor's approval
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 workforce preparedness. Students will develop final job search documents and an individualized professional development plan that sets goals.
Prerequisite: per instructor's approval
Corequisite: None

ADMT 1173 Microsoft Office Access Certification 1 0/1/0
This course prepares participants to sit for the Microsoft Office Access MCAS (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.
Prerequisite: CPTR1104
Corequisite: None

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.
Prerequisite: CPTR1104
Corequisite: None

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.
Prerequisite: Permission of Instructor
Corequisite: None

ADMT 2222 Event Planning 2 2/0/0
This course explores the principles and practices involved in planning and administrating a special business event. Topics will include differentiating the various types of business events, analyzing the process and procedures necessary to plan an event, identifying various resources needed to organize an event and venue selection criteria.
Prerequisite: None
Corequisite: 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.
Prerequisite: ADMT2222
Corequisite: 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 developed interpersonal skills. Therefore, this course also compares and contrasts project management and self-management skills by reviewing the discipline of emotional intelligence.
Prerequisite: CPTR1104
Corequisite: None

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 available software applications needed to produce business publications and visual presentations. 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.
Prerequisite: CPTR1104
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

ADMT 2600 Trends in Office Technology 3 2/1/0
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

ADMT 2900 Administrative Professional Internship 1-3
NoneThis course provides students with actual work experience in an administrative professional career. 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

AGRI 1400 Farm Marketing and Management 3 3/0/0
This course is an introduction to concepts, strategies and technology for farm planning, economic accounting systems and marketing techniques.
Prerequisite: None
Corequisite: None

AMST 1101 Automotive Equipment Fundamentals 2 1/1/0
This course is designed to give the student an understanding of an automotive shop environment. They will learn occupational safety, proper use of power and hand tools, shop equipment, fasteners, precision measuring instruments, electronic information, writing electronic repair orders and industry expectations.
Prerequisite: None
Corequisite: None

AMST 1102 Alignment and Suspension I 3 1/2/0
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: TRNS1102

AMST 1105 Brakes I 3 1/2/0
This course teaches the basic principles of disc and drum brakes, hydraulic system fundamentals, parking brakes and power assist units. Emphasis is placed on operation, diagnosis and repair of various types of brake systems. Basic operation of anti-lock brake systems will also be covered.
Prerequisite: None
Corequisite: TRNS1102

AMST 1109 Starting and Charging 3 2/1/0
This course involves the understanding and service of batteries, charging systems and starting systems. The student will perform tests on these items using bench testing and vehicle testing. Repair will involve rebuilding items, as well as weighing the cost of replacement.
Prerequisite: None
Corequisite: TRNS1102

AMST 1110 Batteries, Starting and Charging Systems 2 1/1/0
This course involves the understanding and service of batteries, charging systems and starting systems. The student will perform tests on these items using bench testing and vehicle testing. Students also will disassemble and reassemble components so they have an understanding of how those items operate. Students will determine cost of replacement verses repair.
Prerequisite: None
Corequisite: TRNS1102

AMST 1111 Automotive Electronics 3 2/1/0
This course involves understanding Ohm's law, multimeter usage, schematic reading, operation of electrical circuits and electronic components. The student will perform electrical tests and repairs on training boards as well as various vehicles. This course is a prerequisite for all second-year automotive courses.
Prerequisite: None
Corequisite: TRNS1102

AMST 1114 Basic Maintenance Service 1 1/0/0
This course will provide the introduction to basic vehicle maintenance. Included will be identification of service points and procedures required for maintenance. Fluid types, brake inspection, tire rotation and service information will be addressed.
Prerequisite: None
Corequisite: None

AMST 1116 General Automotive Service 5 3/2/0
This course will involve concepts and hands-on application in multiple areas of auto repair. Included will be small areas of brakes, electrical, starting and charging systems, and tune-up. This course provides basic repair knowledge of service that is performed in a maintenance environment.
Prerequisite: None
Corequisite: None

AMST 1122 Engines I 3 2/1/0
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: TRNS1102

AMST 1126 Engines II 3 1/2/0
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

AMST 1132 Drive Trains I 3 2/1/0
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

AMST 1136 Drive Trains II 3 1/2/0
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

AMST 2201 Alignment and Suspension II 3 2/1/0
This is a continuation course from the Alignment and Suspension I class. The student will perform repairs and adjustments pertaining to wheel alignments and work with electrical sensors and controls affecting a vehicle's stability control. Diagnostics and repair of steering columns and supplemental restraints also will be covered.
Prerequisite: None
Corequisite: None

AMST 2206 Body Electrical and Mechanical I 3 1/2/0
This course teaches diagnosis and repair of interior and exterior lighting, safety devices, comfort systems, and door, window and seat control systems. The student will use wiring diagrams to pinpoint body electrical concerns. Window, door and seat control service will also be performed. Common vehicle accessories will be addressed.
Prerequisite: None
Corequisite: TRNS1102

AMST 2210 Body Electrical and Mechanical II 2 1/1/0
This course focuses on computer-controlled body components and safety systems. Diagnostics will involve the use of scan tools, multimeters and lab scopes applied to a variety of body controlled devices. Students will learn how the various controllers communicate with each other through a variety of bussed circuits.
Prerequisite: None
Corequisite: None

AMST 2211 Exhaust Analysis Fuel Systems 3 2/1/0
This course will cover the various emission devices used on an automobile as well as the fuel delivery to maintain an efficient operating engine. Items covered will be PCV systems, EGR systems, air injection systems, evaporative systems, catalytic converters and fuel injection controls. Students will diagnose and repair problems using a variety of equipment on project vehicles.
Prerequisite: None
Corequisite: None

AMST 2214 Electronic Powertrain Control I 3 2/1/0
This course will cover the introduction to vehicle computer systems and related components that assist in the management of engine fuel, ignition and emission systems. Sensor inputs, management operation and operational commands are addressed.
Prerequisite: None
Corequisite: None

AMST 2218 Electronic Powertrain Control II 3 1/2/0
In this course, students will study the many electronic control systems used on today's passenger cars and light trucks. Second-generation on-board diagnostics strategy will be covered for ignition, fuel and emissions systems. The course will also incorporate hybrid technology, high pressure gas fuel injection, and diesel injection operation and testing.
Prerequisite: TRNS1102 AND AMST1111
Corequisite: None

AMST 2220 Ignition Systems 3 2/1/0
This course will cover 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

AMST 2225 Brakes II 3 2/1/0
This class is a continuation of AMST 1105 Brakes I. Students will look at a progression of anti-lock brake, traction control, electronic stability control and manufacturer variations

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-car operations with brake part replacement, machining of drums and rotors, and hydraulics.
Prerequisite: None
Corequisite: None

AMST 2233 Automatic Transmission I 3 2/1/0
This course involves the principles of the many systems combined into an automatic transmission. The student will understand planetary gearing, 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 3 1/2/0
The student will practice many of the procedures used in transmission diagnosis, vehicle repair sequences, scan tool data interpretation and diagnosis, transmission removal, installation and adjustment. Transmission cooling system diagnosis and service are also covered.
Prerequisite: None
Corequisite: AMST2233

AMST 2240 Heating Ventilation and Air Conditioning 3 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 and recharging are also covered in depth.
Prerequisite: None
Corequisite: TRNS1102

AMST 2292 Internship 1 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 prepare 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 3 3/0/0
Meets MnTC Goal Areas 5 and 8. 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

ARCH 1122 Computer Aided Drafting for Architecture 4 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: CADD1102 AND ENGT1134
Corequisite: None

ARCH 1126 Residential Project I 3 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

ARCH 2218 Architectural Internship 3 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

ARCH 2220 Specification Writing for Construction 3 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

ARCH 2226 Residential Project II 4 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

ARCH 2230 Mechanical and Electrical Integration 2 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

ARCH 2232 Civil and Structural Integration 3 2/1/0
This course will review the incorporation of civil and structural engineering drawings in coordination with building systems. Content will include analysis of civil and structural drawings and their relationship to commercial and residential building types.
Prerequisite: ARCH2230
Corequisite: None

ARCH 2236 Architectural Presentation 2 0/2/0
Students in this course will develop design schematics and a set of presentation drawings for a commercial project. Emphasis is on verbal and visual presentation techniques.
Prerequisite: ARCH1122 AND ARCH1126
Corequisite: None

ARCH 2242 Mechanical and Electrical Integration 3 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: ARCH1122 AND ARCH1126
Corequisite: None

ARCH 2244 Commercial Projects 4 1/3/0
This course covers the construction document process for commercial building design while having the student complete a self-guided capstone project. Content will include final detailing, scheduling and sheet set layout from a given design developed project.
Prerequisite: ARCH2226 AND ARCH2240
Corequisite: None

ARCH 2248 CADD Alternatives 3 1/2/0
This course will familiarize the student with computer drafting and modeling software for the graphic design of residential construction.
Prerequisite: None
Corequisite: None

ARCH 2250 Project Administration 2 1/1/0
This course provides an understanding of architectural firm structures and legal issues as well as project management procedures used throughout documentation, bidding and construction administration.
Prerequisite: ARCH2226
Corequisite: None

ARCH 2256 Rendering Architecture 3 1/2/0
This course provides the advanced use of computer-aided drafting and modeling using AutoCAD for Architecture software and its related rendering application. The course will develop CADD configuration skills, advanced modeling techniques and various presentation renderings.
Prerequisite: ARCH1112
Corequisite: None

ART 1107 Foundations of Art, 2-D 3 2/1/0
Meets MnTC Goal Area 6F. This course is an introduction to creative thinking, interpretation and self-expression. Students will explore basic two-dimensional elements and principles through the use of various media, tools, materials and processes. Color theory will be introduced.
Prerequisite: None
Corequisite: None

ART 1108 Foundations of Art, 3-D 3 2/1/0
Meets MnTC Goal Area 6F. Through this course, students are introduced to basic three-dimensional concepts as well as a variety of materials and technical processes. Students will create three-dimensional designs that explore form and space.
Prerequisite: None
Corequisite: None

ART 1110 Introduction to Art 3 2/1/0
Meets MnTC Goal Area 6F. This course provides an introduction to the elements and principals of visual arts and to the creative process. Students are encouraged to use a variety of media in drawing, painting and sculpture.
Prerequisite: None
Corequisite: None

ART 1111 Drawing I 3 2/1/0
Meets MnTC Goal Area 6F. This course introduces students to the basic drawing media, techniques and traditions of drawing. Students are exposed to the work of artists, drafters and illustrators and are subsequently guided through a wide variety of drawing experiences and applications.
Prerequisite: None
Corequisite: None

ART 1112 Painting I 3 2/1/0
Meets MnTC Goal Area 6F. Students examine historical and contemporary painting approaches and directions in their beginning experiences with acrylic and/or oil paint, including the study of basic concepts, techniques, formal issues, technology, imagery, color theory and pigment theory.
Prerequisite: None
Corequisite: None

ART 1117 Printmaking I 3 2/1/0
Meets MnTC Goal Areas 2 and 6F. Students will create original works in a variety of

printmaking techniques with emphasis on relief and serigraphy.
Prerequisite: None
Corequisite: None

ART 1118 Watercolor I 3 2/1/0
Meets MnTC Goal Area 6F. This course will introduce students to the fundamental principals, techniques and materials of watercolor media. Students will explore color and design concepts, including composition and the elements of art; traditional and experimental approaches with watercolor media; the fundamentals of the critique process; and traditional and contemporary artworks from the visual canon. Personal expression and visual and critical problem solving are major components of this course.
Prerequisite: None
Corequisite: None

ART 1121 World of Art I 3 3/0/0
Meets MnTC Goal Areas 6 and 8. This course is a survey of architecture, painting and sculpture and their historical and social contexts. Specific periods from prehistoric through the Middle Ages will be introduced.
Prerequisite: None
Corequisite: None

ART 1122 World of Art II 3 3/0/0
Meets MnTC Goal Areas 6 and 8. This introductory course gives students a deeper appreciation and knowledge of Western art and the cultures that created it. This course focuses on the fascinating changes that occurred in the Italian Renaissance and continues through to modern artists and influences of the 20th century.
Prerequisite: None
Corequisite: None

ART 1123 Global Art History: Asian, Islamic, African, Mesoamerican 3 3/0/0
Meets MnTC Goal Areas 6 and 2. Throughout the semester students will explore the influences and philosophies that have impacted art in regions outside of the Western world. Topics vary but will include the origins and historic development of art in African, Asian, Islamic and Mesoamerican cultures.
Prerequisite: None
Corequisite: None

ART 1124 American Art 3 3/0/0
Meets MnTC Goal Areas 6 and 7. This course explores the great variety and depth of North American art. Native American, colonial, Latino and contemporary art are the focus of the course.
Prerequisite: None
Corequisite: None

ART 1140 Handbuilt Ceramics 3 2/1/0
Meets MnTC Goal Area 6F. This course will develop the skills of ceramics, focusing on handbuilding. Using the methods of coil, pinching and slab building, the students will make a variety of forms, ranging from functional to sculptural. Students will create finished products, including the use of glaze and other finishes. The nature of handbuilding techniques provides a more immediate opportunity to express creativity.
Prerequisite: None
Corequisite: None

ART 1141 Ceramics I 3 2/1/0
Meets MnTC Goal Area 6F. Students learn about pottery tools and their uses, construction methods such as coil and slabs, aspects of pottery form and design, formulation and application of glazes, and operation of a ceramic kiln. The course is designed for the novice.
Prerequisite: None
Corequisite: None

ART 2111 Drawing II 3 2/1/0
Meets MnTC Goal Areas 2 and 6F. This course focuses on student use and understanding of a variety of drawing media such as pencil, pastel, pen and ink, and charcoal. Intermediate use of composition and color is emphasized.
Prerequisite: ART1111
Corequisite: None

ART 2112 Painting II 3 2/1/0
Meets MnTC Goal Areas 2 and 6F. Students research and examine historical and contemporary painting approaches and directions informing their social, historical, philosophical, artistic, etc. choices regarding subject matter.
Self-generated subject matter and research, intermediate-level use of composition, color theory and technique are emphasized.
Prerequisite: ART1112
Corequisite: None

ART 2114 Photographic Art I 3 3/0/0
Meets MnTC Goal Areas 2 and 6F. This course introduces students to photographic equipment, materials, processes and philosophies while examining photography and its role in contemporary culture with focus on artistic content. Traditional photographic processes, digital photographic processes and alternative printing and presentation processes are explored, and artistic rationale and execution are examined.
Prerequisite: None
Corequisite: None

ART 2116 Mixed Media I 3 2/1/0
Meets MnTC Goal areas 2 and 6F. Multimedia art exploration is a problem-solving art studio experience involving the use of a variety of traditional and non-traditional art materials.
Prerequisite: None
Corequisite: None

ART 2241 Advanced Ceramics 3 2/1/0
Meets MnTC Goal Area 6F. This course will build on the skills developed in Ceramics I with emphasis on wheel throwing, glazing and firing techniques.
Prerequisite: ART1141
Corequisite: None

ART 2250 Art Mentor Experience 2 0/0/2
This course gives students the opportunity to work side-by-side with professional artists. Students will select an artist mentor based on the media and techniques the student chooses to explore. Students will meet with an art faculty adviser to select a mentor and to create a plan of study for the semester. Registration for this course is by instructor permission only.
Prerequisite: ART1107 AND ART1111
Corequisite: None

ART 2260 Art, Portfolio Design and Professional Development 1 0/0/1
Meets MnTC Goal Area 6F. Art students will learn how to create an electronic portfolio, showcasing their work for transfer or professional purposes. Students will also explore ways to promote themselves as artists using the latest technology.
Prerequisite: None
Corequisite: None

ART 2261 Art, Portfolio Design and Professional Development Internship 2 1/0/1
Meets MnTC Goal Area 6F. Art students will create an electronic portfolio of their work, write professional documents, explore ways to promote themselves as artists using the latest technology, research exhibition opportunities and explore and experience non-art-production professions/internships in the field of art.
Prerequisite: ENGL1101
Corequisite: None

ART 2912 Art Studio Topics 1-3 None
This course is for intermediate artists interested in developing their own body of work. Students research and examine historical and contemporary art approaches and directions informing their social, historical, philosophical, artistic, etc. choices regarding subject matter. Self-generated subject matter and research, intermediate-level use of composition, color theory and technique are emphasized.
Prerequisite: Instructor Permission Required
Corequisite: None

ART 2999 AFA-Visual Art Capstone Exhibition 1 0/1/0
This class serves as the conceptual and technical culmination of the AFA-Visual Arts program. Students will complete a self-directed project that results in an individual or group exhibition. Advanced study, research and individualized art-making required.
Prerequisite: This course must be taken in the semester of graduation. This course requires instructor approval.
Corequisite: ART2260 AND Must be taken in the semester of graduation of the AFA-Visual Art

ASL 1111 American Sign Language and Deaf Culture I 3 3/0/0
This course covers the beginning fundamental principles of American Sign Language (ASL) and introduces information about the Deaf community and Deaf culture. The course will familiarize students with basic ASL vocabulary and grammar, including hand shapes, body movements and facial expressions to convey meaning.
Prerequisite: ELL 1080 or ENGL 0096 or ENGL 0097 or placement by assessment
Corequisite: None

ASL 1112 American Sign Language and Deaf Culture II 3 3/0/0
This course covers the fundamental principles of Level II American Sign Language (ASL) and introduces more advanced information about the Deaf Community and Deaf Culture. This course focuses on expanding knowledge and usage of ASL vocabulary including fingerspelling, numbers and classifiers, and continues with more complex ASL grammar and sentence structure.
Prerequisite: Grade of B or better in ASL1111
Corequisite: None

ASL 1113 American Sign Language and Deaf Culture III 4 4/0/0
This course is designed to offer continued study of American Sign Language (ASL) and Deaf culture. Emphasis will be placed on improvements in speed and fluency along with reinforcement of appropriate grammar usage and conversational skills. This course will also introduce deaf idioms and their use within Deaf culture.
Prerequisite: ASL1112 AND Grade of B or better in ASL1112
Corequisite: None

ASL 1114 American Sign Language and Deaf Culture IV 4 4/0/0
This course, the fourth in a series of American Sign Language (ASL) and Deaf culture courses, focuses upon the grammatical features of ASL and vocabulary expansion. Content of this course will focus on sentence construction, inflecting verbs and classifiers. Fluency and accuracy of fingerspelling will continue to be developed, as well as the use of lexicalized signs and numbering.
Prerequisite: ASL1113 AND Grade of B or better in ASL1113
Corequisite: None

ASL 1115 American Sign Language and Deaf Culture V 3 3/0/0
This course focuses on advanced vocabulary, communicative functions and language techniques for effective expression of meaning and context of American Sign Language (ASL).
Prerequisite: ASL1114 AND Grade of B or better in ASL1114
Corequisite: None

ASL 2000 Advanced Fingerspelling, Numbers and Classifiers 2 2/0/0
This course focuses on enhancement of receptive and expressive fingerspelling and number skills. It also includes the fundamentals of American Sign Language (ASL) classifiers.
Prerequisite: ASL1115 AND Grade of B or better in ASL1115
Corequisite: None

ASL 2100 Linguistics of American Sign Language 3 3/0/0
This is an introduction to the linguistic structure of American Sign Language (ASL). This course includes linguistic fields, communication systems, syntax, phonology and grammar. This course also contains other linguistic elements unique to spatially- and visually-based languages such as morphemes, phonemes, semantics and pragmatics.
Prerequisite: Grade of B or better in ASL1115 AND Grade of B or better in IPP2112 AND Grade of B or better in IPP2113
Corequisite: None

ASLM 1110 Introduction to Medical Interpreting 3 3/0/0
This course is an introduction to 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.
Prerequisite: Graduation from an Interpreter Education Program OR
Hold current interpreter certification
Corequisite: None

ASLM 1111 Ethical Decision Making for Medical Interpreters 2 2/0/0
Medical interpreting requires interpreters to respond to a wide range of difficult situations in an ethical manner. This course will focus on ethical dilemmas that require interpreters to use decision making processes in a variety of medical settings.
Prerequisite: Graduation from an Interpreter Education Program OR hold current interpreter certification
Corequisite: None

ASLM 1112 Medical Signs 2 2/0/0
This course introduces sign language vocabulary for basic medical settings and exposes interpreters to a variety of human body systems.
Prerequisite: LTH1110 AND HLTH1116 AND Graduate from an Interpreter Education Program OR HLTH1110 AND HLTH1116 AND Hold current interpreter certification
Corequisite: None

ASLM 1113 Special Topics in the Field of Medical Interpreting 2 2/0/0
This course introduces special topics in medical interpreting. Medical interpreters work in a variety of health care settings, including hospitals, clinics, private offices, rehabilitation centers, dental offices, vision centers and nursing homes. Interpreters also confront unique issues related to working in mental health facilities, substance abuse clinics, domestic violence programs or similar types of health care settings.
Prerequisite: ASLM1110
Corequisite: None

ASLM 1114 Introduction to Mental Health Interpreting 3 3/0/0
Interpreters are needed in a variety of mental health settings including in-patient and out-patient settings, peer-led settings, outreach settings, day programs, private clinician offices, clinic settings and emergency rooms. This course will introduce a variety of mental health settings and the professionals who are present there.
Prerequisite: Graduation from an Interpreter Education Program OR hold current Interpreter Certification
Corequisite: None

BIOL 1102 Introduction to Horticulture 3 2/1/0
Meets MnTC Goal Area 3. The course is an introductory study of green plants and their growth. The course will explore basic plant anatomy, morphology, physiology, taxonomy, pathology, propagation, soil science and plant nutrition, and ethnobotony. This course includes both lecture and lab.
Prerequisite: College level reading skills.
Corequisite: None

BIOL 1104 Biology of Human Concerns 3 2/1/0
Meets MnTC Goal Areas 2 and 3. This course explores issues related to human biology with reference to genetics, nutrition, health, disease or other contemporary issues. Elements of molecular, cell and organismal biology are introduced as needed to understand the topics studied. This course is intended for non-science majors and consists of lecture and laboratory components.
Prerequisite: None
Corequisite: None

BIOL 1107 Environmental Science Issues 3 3/0/0
Meets MnTC Goal Areas 2, 3 and 10. This courses involves the discussion and study of ecosystems, biodiversity, human adaptations to and modifications of those ecosystems, and current environmental problems and their possible solutions. This course includes lab-like experiences including an ecosystem observation and data analysis. This course is for non-science majors.
Prerequisite: None
Corequisite: None

BIOL 1108 Environmental Science Issues Lab 1 0/1/0
Meets MnTC Goal Areas 2, 3 and 10. This course includes laboratory work completed in conjunction with BIOL 1107 Environmental Science Issues. Laboratory experiences may include lab and field exercises, computer simulations and collection and analysis of data related to current environmental issues and their possible solutions. This optional lab must be taken concurrently with BIOL 1107.
Prerequisite: None
Corequisite: None

BIOL 1115 Introduction to Biotechnology 3 3/0/0
Meets MnTC Goal Area 3. This course is designed to acquaint students with the field of biotechnology including historical development, current technologies and future trends. An overview of the molecular and genetic principles and processes used to manipulate living organisms and their products will be presented, as well as forensic, medical, agricultural and industrial applications. The course will also examine the ethical implications 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.
Prerequisite: None
Corequisite: None

BIOL 1122 General Biology I 4 3/1/0
Meets MnTC Goal Areas 2 and 3. This course is an introduction to the structure and function of living systems with an emphasis on cellular and molecular biology. Fundamental concepts include the chemical basis of life, cell structure and function, cell division, metabolism, classical and molecular genetics, and biotechnology. This course includes a laboratory component incorporating experimental design, microscopic work, and cellular and molecular biology techniques. Along with BIOL1123, this course is part of a two-semester sequence of general biology that can be taken in any order.
Prerequisite: Assessment into ENGL 1101 or college level writing equivalent.
Corequisite: None

BIOL 1123 General Biology II 4 3/1/0
Meets MnTC Goal Areas 3 and 10. This course is an introduction to living organisms, emphasizing evolution, biological diversity and ecology. Topics will include mechanisms of evolution, classification and diversity of life, structure and function of organisms, and interaction of organisms at all levels of an ecosystem. This course includes a laboratory component incorporating field activities, microscopic work, dissection and plant systems. Along with BIOL1122, this course is part of a two-semester sequence of general biology that can be taken in any order.
Prerequisite: Assessment into ENGL 1101 or college level writing equivalent.
Corequisite: None

BIOL 1125 Basic Immunology 2 1/1/0
This course is intended for Medical Laboratory Technician students and other health professionals. Topics covered include principles of antigens, antibodies and their combination in health, disease and serological laboratory procedures. The course discusses hepatitis, AIDS, lupus, rheumatoid arthritis, Lyme disease, syphilis, infectious mononucleosis and streptococcal infections.
Prerequisite: None
Corequisite: None

BIOL 1152 Food Science 3 3/0/0
Meets MnTC Goal Area 3. 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 includes laboratory-like components. Students will use common laboratory techniques to identify select food-borne pathogens and utilize principles of risk assessment and hazard analysis to perform a disease outbreak investigation.
Prerequisite: None
Corequisite: None

BIOL 1161 Introduction to Freshwater Biology 3 2/1/0
Meets MnTC Goal Areas 3 and 10. This course introduces students to basic principles of freshwater biology. Topics include the origins and features of basins and channels, the aquatic environment, basic water chemistry, aquatic organisms and aquatic ecology. Class includes a lab.
Prerequisite: Completion of ENGL0050 and ENGL0040 with a grade of C or higher OR ENGL0095 with a grade of C or higher OR placement in ENGL1101
Corequisite: None

BIOL 1170 Essentials of Human Anatomy and Physiology 4 4/0/0
Meets MnTC Goal Area 3. This course introduces students to the structure and function of the human body using an organ system approach. Beginning with the levels of biological organization, study will proceed through the following organ systems: integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic and immune, respiratory, digestive, urinary, and reproductive systems. This course is open to all students desiring a greater understanding of human anatomy and physiology; however, it is specifically designed for students pursuing health care-related programs such as Pharmacy Technology and Massage Therapy. This course contains a lab-like component.
Prerequisite: Successful completion of or assessment into ENGL 1101.
Corequisite: None

BIOL 2010 General Ecology 4 3/1/0
Meets MnTC Goal Areas 3 and 10. This course provides a study of the structure and function of ecological systems, including an application of ecological principles to local and global environmental issues. Topics covered include energy flow, nutrient cycling, organization, ecological succession, population dynamics (including the ecology of

species interactions and factors that influence and regulate population numbers) and linkages among species and ecosystem functions. Lecture is accompanied by laboratory and field exercises.
Prerequisite: Completion of MATH 1020 or placement into MATH 1114 AND BIOL1122 AND BIOL1123
Corequisite: None

BIOL 2202 Principles of Nutrition 3 3/0/0
Meets MnTC Goal Areas 2 and 3. 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, athletes, 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.
Prerequisite: CHEM1100 OR CHEM1111 OR BIOL2260 OR BIOL1122 OR Instructor permission
Corequisite: None

BIOL 2220 General Microbiology 4 3/1/0
Meets MnTC Goal Area 3. This course provides an overview of the structure and function of microorganisms, including archaea, bacteria, viruses, fungi and parasites. Students will examine the molecular diversity, genetics, physiology and ecology of these organisms in relation to microbial evolution, industrial and applied applications, and host-pathogen interactions. Lecture is accompanied by laboratory experiences, including aseptic technique, differential staining procedures, cultural and physical characteristics, biochemical testing, microbial control, microbiology of water and soil, and identification of unknown cultures.
Prerequisite: BIOL1122
Corequisite: None

BIOL 2240 Genetics 4 3/1/0
Meets MnTC Goal Area 3. This course is a study of the basis of heredity with emphasis on modern molecular and classical Mendelian genetics. 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 classical genetic techniques.
Prerequisite: BIOL1122
Corequisite: None

BIOL 2260 Human Anatomy and Physiology I 3 3/0/0
Meets MnTC Goal Area 3. 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.
Prerequisite: Assessment into ENGL 1101 or college level writing equivalent.
Corequisite: None

BIOL 2261 Human Anatomy and Physiology I Lab 1 0/1/0
Meets MnTC Goal Area 3 when taken with BIOL 2260. This course is the laboratory component of 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. This course is the first of a two-semester sequence in which anatomy and physiology are studied with an emphasis on structure and functions of systems.
Prerequisite: Assessment into ENGL 1101 or College Level writing equivalent.
Corequisite: BIOL 2260

BIOL 2262 Human Anatomy and Physiology II 3 3/0/0
Meets MnTC Goal Area 3. 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, lymphatic and immune, respiratory, digestive, urinary and reproductive systems. Emphasis is on the structure and function of included systems. This course contains a lab-like component.
Prerequisite: Assessment into ENGL 1101 or college level writing equivalent. AND BIOL2260
Corequisite: None

BIOL 2263 Human Anatomy and Physiology II Lab 1 0/1/0
Meets MnTC Goal Area 3 when taken with BIOL 2262. This course is the laboratory component of a comprehensive introductory overview of human anatomy and physiology that includes basic fundamental concepts of cells, tissues and organs making up the endocrine, cardiovascular, respiratory, digestive, urinary and reproductive systems. This course is the second of a two-semester sequence in which anatomy and physiology are studied with an emphasis on structure and functions of systems.
Prerequisite: BIOL2260 AND BIOL2261 AND Assessment into ENGL 1101 or College Level writing equivalent.
Corequisite: BIOL2262

BIOL 2265 Diagnostic Microbiology 4 3/1/0
Meets MNTC Goal Area 3. This course discusses microorganisms of medical importance in relationship to disease and diagnosis, emphasizing identification of common pathogenic bacteria, fungi, yeast and parasites, specimen collection and introducing virology and immunology. Laboratory covers basic techniques including reasons for specimen rejection, identification of normal flora and pathogens, morphology, classification and culturing of bacteria, identification of bacterial unknowns, fungi and parasites.
Prerequisite: Assessment into or successful completion of ENGL 1101 or college level reading and writing equivalent.
Corequisite: None

BIOL 2267 Medical Microbiology 3 3/0/0
Meets MnTC Goal Area 3. 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.
Prerequisite: Assessment into ENGL 1101.
Corequisite: None

BIOL 2268 Medical Microbiology Lab 1 0/1/0
Meets MnTC Goal Area 3. This laboratory course includes the fundamental techniques of cultivation, staining, biochemical analysis and identification of known and unknown bacterial isolates, and antimicrobial susceptibility testing. Morphological examination and pathogenesis of fungi, protozoans and helminths are also addressed.
Prerequisite: Assessment into ENGL1101 or college level writing equivalent.
Corequisite: BIOL2267

BIOL 2970 Internship Experience 1--3
NoneThis 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 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

BLDG 1000 Introduction to the Construction Trades 3 0/3/0
This course is designed to give students a hands-on introduction to the construction building trades. Students will construct building systems related to carpentry, plumbing, heating, refrigeration, electrical and construction management.
Prerequisite: None
Corequisite: None

BLDG 1110 Principles of Residential and Commercial Construction 3 1/2/0
Students work in small groups with industry specialists and education professionals. Students attend multiple classroom and lab activities where they learn safety requirements for construction environments, proper use of a variety of hand tools, applications of shop equipment, the residential and commercial building process, and small equipment operations. Students will participate in a speed interviewing exercise with industry experts and learn about occupations in the construction trades profession.
Prerequisite: Instructor Approval
Corequisite: None

BLDG 1114 Blueprint Reading I 2 2/0/0
This course provides the student with a working knowledge of blueprints and specifications. The student gains an understanding of blueprints, then interprets and applies this knowledge to job situations.
Prerequisite: None
Corequisite: None

BLDG 1120 Construction Estimating I 2 1/1/0
This course covers the mathematical procedures used in material estimating and completing quantity takeoffs for building projects.
Prerequisite: None
Corequisite: None

BUS 1120 Spreadsheet and Database Concepts 3 3/0/0
This course provides the student with in-depth coverage of a spreadsheet and a database management system as used in a business setting. Students should be familiar with Windows and word processing.
Prerequisite: None
Corequisite: None

BUS 1130 Introduction to Inventory Control and Purchasing 3 3/0/0
This course will provide a basic understanding of inventory management including purchasing, inventory, production and distribution processes. The course will cover cost concepts, inventory planning, ordering methods, receiving acceptable goods, establishing requirements and quantities, and managing inventory levels.
Prerequisite: None
Corequisite: None

BUS 1141 Introduction to Business 3 3/0/0
This course is designed to give the student an overview of the business and economic factors that sustain our American enterprise system. Topics included are economic systems and the foundations of American business, international business, fundamentals, management, forms of a business enterprise including franchises, human resources management, marketing and consumer behavior, accounting, securities markets and the ethical and social responsibilities of business.
Prerequisite: None
Corequisite: None

BUS 1143 Office Procedures 3 3/0/0
This is a capstone course in office organization, business ethics and responsibilities of office workers. Emphasis is placed on decision-making ability and the exercise of good human behavior. The course will cover all aspects of the office, from behavior to technologies used. This course will also cover what it means to be a professional in any

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 major expenditures 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 Agribusiness, 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 an 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 business 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

BUS 2206 Principles of Marketing 3 3/0/0
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 derived view drawing tools required to generate complex solid models and create industry-standard drawing layouts based on the designed geometry.
Prerequisite: CADD1000
Corequisite: None

CADD 1102 Fundamentals of CADD 4 2/2/0
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 versions of the Autocad, Inventor and Solidworks drawing software.
Prerequisite: CADD1102 AND MCDD1102
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 drawing 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

CDEV 1105 Development/Guidance 3 3/0/0
This course provides an overview of childhood development from conception through age 8, 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 guidance techniques for individual and group settings. This course will help students to understand behavior problems and identify strategies to prevent and resolve problem behaviors.
Prerequisite: None
Corequisite: None

CDEV 1107 Introduction to Early Education 3 2/1/0
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

CDEV 2200 Integrating Play 3 2/1/0
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
Corequisite: None

CDEV 2229 Imaginative Learning 3 2/1/0
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: CDEV1105 AND CDEV1107
Corequisite: None

CDEV 2236 Occupational Experience 1 0/0/1
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

CDEV 2238 Integrating Children with Special Needs 3 2/1/0
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

CDEV 2241 Observing and Assessing 2 1/1/0
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. Student 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

CDEV 2242 Infant/Toddler Program 3 2/1/0
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

CDEV 2244 Parent Professional Relations 3 3/0/0
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

CDEV 2246 Foundations in Literacy 3 3/0/0
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

CDEV 2290 Internship 3 0/0/3
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. This course is to be taken during the student's final semester in the program.
Prerequisite: None
Corequisite: None

CHEM 0095 Essential Chemistry Skills 1 1/0/0
This course covers basic chemistry concepts and elementary mathematical and problem-solving skills necessary for success in a first-semester chemistry course. 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

CHEM 1050 Lab Calculations/Procedures 1 1/0/0
This course prepares students to apply mathematics (percents, metric system, molar mass, equivalent mass, molarity, normality, ratios, etc.) to formulas used in chemistry, histotechnique and the medical laboratory courses. The course emphasizes practical application of lab equations used to calculate quantities required to prepare chemical solutions/regents. 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

CHEM 1100 Fundamental Concepts of Chemistry 3 2/1/0
Meets MnTC Goal Areas 2 and 3. 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

CHEM 1101 Principles of General Chemistry 4 3/1/0
Meets MnTC Goal Areas 2 and 3. 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, thermochemistry and properties of solids, liquids and gases. The laboratory component introduces techniques, methods and instrumentation.
Prerequisite: Math 0095 or placement by assessment
Corequisite: None

CHEM 1105 Medical Chemistry 3 2/1/0
This 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

CHEM 1111 General Inorganic Chemistry I 5 4/1/0
Meets MnTC Goal Areas 2 and 3. This course is the first of a two-course series (CHEM1111 and CHEM1112). Students will learn the general chemistry principles: atomic structure, stoichiometry, solutions, bonding, thermochemistry, electronic structure, periodic properties of the elements, intermolecular forces and properties of solids, liquids and gases. The course includes a lab.
Prerequisite: MATH1020 OR Instructor permission for students who do not score high enough on the placement exam for placement into Chem1111 but wish to enroll in Chem1111. Students with this permission must co-register for Chem 0095.
Corequisite: None

CHEM 1112 General Inorganic Chemistry II 5 4/1/0
Meets MnTC Goal Areas 2 and 3. This course is the second course of a two-course series (CHEM1111 and CHEM1112). Students will learn the general chemistry principles: solution chemistry, kinetics, chemical equilibrium, acid-base chemistry, solubility equilibrium, thermodynamics, oxidation-reduction, electrochemistry, coordination chemistry, nuclear chemistry and introductory environmental chemistry. The course includes a lab.
Prerequisite: CHEM1111
Corequisite: None

CHEM 1115 Introduction to Organic and Biochemistry 4 3/1/0
Meets MnTC Goal Areas 2 and 3. 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

CHEM 2224 Organic Chemistry I 5 4/1/0
Meets MnTC Goal Areas 2 and 3. 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, stereo chemistry, substitution and elimination reactions, electrophilic and free radical addition, alkenes, alkynes, and various functional groups, conjugation and resonance, benzene and the aromatics,

aromatic-aliphatic compounds, alcohols and ethers. The course includes a lab which will include techniques for the purification, synthesis and characterization of organic compounds and the study of organic reactions. Green chemistry techniques will be practiced whenever possible.
Prerequisite: CHEM1112
Corequisite: None

CHEM 2225 Organic Chemistry II 5 4/1/0
Meets MnTC Goal Areas 2 and 3. This course is the second course of a two-course series (CHEM2224 and CHEM2225). 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, carbanions, 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: CHEM2224
Corequisite: None

CHEM 2970 Internship Experience 1--3
NoneThis 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 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

CHIN 1101 Introduction to Chinese 3 3/0/0
Meets MnTC Goal Area 8. This course will introduce students to the Beiping (Mandarin) dialect of Chinese including basic grammar, the Pin Yin system of transliteration and reading and writing Chinese characters.
Prerequisite: None
Corequisite: None

CIVL 1000 Introduction to Civil Engineering Technology 2 2/0/0
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 1100 Survey I: Fundamentals of Surveying 3 2/1/0
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 I: Fundamentals 2 1/1/0
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 3 1/2/0
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: CIVL1100
Corequisite: None

CIVL 1138 CADD II: Plan Layout 3 2/1/0
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: CADD1102
Corequisite: None

CIVL 2209 Construction Inspection 3 2/1/0
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: CIVL1102 OR CIVL1102
Corequisite: None

CIVL 2210 Road Design 3 2/1/0
The student will complete drawings and computations typical of those used in the design of roadways. These may include control line location maps, topographic drawings, cross sections, plan and profile earthwork computations.
Prerequisite: CIVL1119 AND CIVL1138
Corequisite: None

CIVL 2230 Civil Engineering Technology Internship 3 0/0/3
The 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: CIVL1138
Corequisite: None

CIVL 2232 Survey III: Legal Surveys 3 2/1/0
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: CIVL1119
Corequisite: None

CIVL 2234 Utility Design 3 2/1/0
The student will learn principles of sanitary, storm and water system layouts, design and construction. Design criteria and standards, plan and profile principles, cost estimating, construction staking and inspection of the different systems will be emphasized.
Prerequisite: CIVL1119 AND CIVL1138
Corequisite: None

CIVL 2238 CADD III: Project Design 3 2/1/0
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 drawing.
Prerequisite: CIVL1138
Corequisite: None

CIVL 2240 Introduction to Geographic Information Systems 3 3/0/0
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 III: Global Positioning System Technology and Equipment 3 2/1/0
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: CIVL1119
Corequisite: None

CIVL 2244 Survey IV: Equipment Software 3 2/1/0
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: CIVL1102
Corequisite: None

CIVL 2246 Introduction to Hydrology 3 3/0/0
This course will include introduction to hydraulic principles, hydrology, pipe and open channel flow, watershed analysis and storm water regulations.
Prerequisite: CIVL2234 AND CIVL2240
Corequisite: None

COMM 1100 Communication and Effective Human Relations 3 3/0/0
Meets MnTC Goal Areas 1 and 2. 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 teams and the need for greater ability to cope effectively with life/work issues and problems that require extensive knowledge of human relationships.
Prerequisite: ENGL0096 OR ENGL0040 AND ENGL0050 OR By Assessment
Corequisite: None

COMM 1120 Introduction to Public Speaking 3 3/0/0
Meets MnTC Goal Area 1. This course clarifies the process of oral communication, clarifies the basic principles of public speaking and allows the student to increase the application of these principles while both speaking and listening.
Prerequisite: Assessment into ENGL 1101
Corequisite: None

COMM 1130 Small Group Communication 3 3/0/0
Meets MnTC Goal Areas 1 and 2. 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

Course #	CourseTitle	CR	Lec/Lab/OJT

COMM 1140 Interpersonal Communication 3 3/0/0
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 interactions and draw his/her own conclusions about the effectiveness of interpersonal communication.
Prerequisite: Assessment into ENGL 1101
Corequisite: None

COMM 2220 Oral Interpretation 3 3/0/0
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.
Prerequisite: SPCH1114
Corequisite: None

COMM 2230 Intercultural Communication 3 3/0/0
Meets MnTC Goal Area 7. 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.
Prerequisite: Assessment into ENGL 1101
Corequisite: None

COMM 2240 Family Communication 3 3/0/0
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.
Prerequisite: Assessment into ENGL 1101
Corequisite: None

COMM 2250 Gender Communication 3 3/0/0
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.
Prerequisite: Assessment into ENGL 1101
Corequisite: None

COMM 2260 Computer-Mediated Communication 3 3/0/0
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.
Prerequisite: ENGL1101
Corequisite: None

CONM 1101 Construction Documents and Codes 3 2/1/0
This course provides an introduction to understanding construction drawings, specifications, processes and building codes.
Prerequisite: None
Corequisite: None

CONM 1102 Site/Building Layout 2 1/1/0
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.
Prerequisite: None
Corequisite: None

CONM 1104 Construction Management Principles 2 2/0/0
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.
Prerequisite: None
Corequisite: None

CONM 1108 Principles of Estimating 4 2/2/0
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.
Prerequisite: CONM1101
Corequisite: None

CONM 1124 Building Systems 3 3/0/0
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.
Prerequisite: None
Corequisite: None

CONM 2204 Materials Testing 3 1/2/0
This course covers inspection techniques, methods of material measurement, documentation, material sampling and testing methods for soils and concrete.
Prerequisite: None
Corequisite: None

CONM 2206 Building Codes 2 2/0/0
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.
Prerequisite: None
Corequisite: None

CONM 2208 Construction Bidding 2 1/1/0
This course will explore standard construction contract documents and project estimating procedures and their use in building a competitive bid.
Prerequisite: CONM1108
Corequisite: None

CONM 2210 Construction Scheduling 3 2/1/0
Planning and scheduling are important management tools. In this course students will work with scheduling techniques commonly used in the construction industry to bring projects to timely and economically successful completion.
Prerequisite: None
Corequisite: CONM2217

CONM 2212 Site Management 3 3/0/0
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.
Prerequisite: None
Corequisite: None

CONM 2213 Safety Management 2 2/0/0
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.
Prerequisite: None
Corequisite: None

CONM 2217 Computer Estimating and Bidding 3 2/1/0
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.
Prerequisite: CONM1108 AND CONM1124
Corequisite: CONM2210

CONM 2222 Construction Management Internship 2 0/0/2
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.
Prerequisite: None
Corequisite: None

COSM 1000 Principles and Practices 3 3/0/0
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.
Prerequisite: None
Corequisite: None

COSM 1001 Introduction to Cosmetology 3 0/3/0
In this course students will learn some of the basic techniques pertaining to hair, skin and nails and meet 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.
Prerequisite: None
Corequisite: None

COSM 1117 Shampooing and Rinsing 1 1/0/0
This course covers shampooing and draping. Students will learn the importance of selecting the correct shampoo for various hair types.
Prerequisite: None
Corequisite: None

COSM 1119 Haircutting 1 1/0/0
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.
Prerequisite: None
Corequisite: None

COSM 1129 Hairstyling 1 1/0/0
This course will instruct students in conducting services in a safe environment. Students

will learn the styling and finishing techniques to complete a hairstyle to the satisfaction of the client.
Prerequisite: None
Corequisite: None

COSM 1130 Properties of the Hair and Scalp 1 1/0/0
In this course students will learn the different layers of the hair and how it can be damaged. It is essential for students to be able to analyze a client's hair, determine what type of damage the hair has experienced and prescribe corrective treatment.
Prerequisite: None
Corequisite: None

COSM 1153 North Dakota Laws and Rules 1 1/0/0
This course prepares students for the North Dakota Laws and Rules portion of their state license examination.
Prerequisite: Graduate from a Minnesota cosmetology program or hold a valid Mn license.
Corequisite: None

COSM 1157 Histology of the Skin 1 1/0/0
In this course students will learn the basic structure of the skin and its function. Students will learn how to conduct services in a safe environment and how to take measures to prevent spreading infectious and contagious diseases.
Prerequisite: None
Corequisite: None

COSM 1159 Facials, Make-Up, and Hair Removal 1 1/0/0
In this course students will learn the uses of various skin care products and how to apply them to different skin types. Students will learn basic make-up application, including artificial lashes, and basic massage movements to assist in providing basic skin care services.
Prerequisite: None
Corequisite: None

COSM 1161 Nail Structure and Growth 1 1/0/0
In this course students will learn the structure of the nail, how to recognize various disorders and which disorders can be serviced in the salon.
Prerequisite: None
Corequisite: None

COSM 1163 Hair Color 1 1/0/0
In this course students will learn how to conduct a color service in accordance with a client's needs and the importance of using a variety of salon products and techniques to achieve the appropriate color outcome.
Prerequisite: None
Corequisite: None

COSM 1171 Principles of Hair Design 1 1/0/0
This course will give students an understanding of design and how to incorporate design into creating a pleasing hairstyle for each client's facial features.
Prerequisite: None
Corequisite: None

COSM 1173 Chemistry and Electricity 1 1/0/0
In this course students will learn the two types of electricity, how they are measured and the safety devices pertaining to electricity. Many of the services students will provide actually change the hair, skin and nails chemically. It is essential that students have a good working knowledge of chemistry in order to provide the safest and most effective services.
Prerequisite: None
Corequisite: None

COSM 1177 Infection Control 1 1/0/0
In this course students will learn the nature of various organisms, how they relate to disease and how their spread can be prevented in the salon and at school.
Prerequisite: None
Corequisite: None

COSM 1179 Minnesota Cosmetology Laws and Rules 1 1/0/0
This course prepares students for the Laws and Rules portion of their state license examination.
Prerequisite: None
Corequisite: None

COSM 1200 Salon Practicum 1--18 None
In this course, students will work in a licensed salon in order to meet the required 1550 hours of salon experience stipulated by the State Board of Cosmetology. Students will use this course to supplement their existing salon experience. Credits will be awarded to reflect the number of additional hours the student works in order to meet the state requirements.
Prerequisite: None
Corequisite: None

COSM 2000 Artistry in Hairstyling 1 1/0/0
This course focuses on the various types of non-surgical hair additions. Students will learn about the care and styling of wigs and basic braiding procedures to create hairstyles that are pleasing to clients.
Prerequisite: None
Corequisite: None

COSM 2100 Chemical Texture Services 1 1/0/0
Students will learn about hair relaxation and wave formation techniques in accordance with manufacturers' directions. Other topics in the course include consulting with clients to determine their needs and preferences and the importance of conducting chemical services in a safe environment.
Prerequisite: None
Corequisite: None

COSM 2200 Manicuring/Pedicuring 1 1/0/0
In this course students will learn basic manicuring and pedicuring procedures. Students will understand the importance of providing services in a safe environment.
Prerequisite: None
Corequisite: None

COSM 2300 Anatomy of the Head, Face & Neck 1 1/0/0
In this course students will learn basic anatomy of the head, face and neck so they can perform the services for which they are trained and qualified.
Prerequisite: None
Corequisite: None

COSM 2400 Advanced Nail Techniques 1 1/0/0
In this course students will learn how to conduct a client consultation to determine client needs and preferences. Students will learn about a variety of salon products that will enable them to provide nail services to clients.
Prerequisite: None
Corequisite: None

COSM 2500 Salon Business 1 1/0/0
In this course students will learn how to manage their time to provide efficient client services. Students will learn the necessary steps to retain clients and how to market salon products and maintain business records.
Prerequisite: None
Corequisite: None

COSM 2600 Professional Image 1 1/0/0
In this course students will learn about the importance of physical presentation, beauty and wellness, and ergonomics in the salon.
Prerequisite: None
Corequisite: None

COSM 2700 Nail Art 1 0/1/0
In this course students will perform various forms of nail art techniques and designs on natural and artificial nails. This course will include client consultation, safety and sanitation.
Prerequisite: None
Corequisite: None

COSM 2800 Alexandria Body Sugaring 1 1/0/0
In this course students will learn how to remove hair using the Alexandria Professional Body Sugaring advanced system. The course includes theory and thorough knowledge of the correct techniques employed in the practice of body sugaring.
Prerequisite: None
Corequisite: None

CPTR 1001 Introduction To Programming and Scripting 3 1/2/0
This course is an introduction to computer programming. Emphasis will be on programming concepts, program design methodology, program debugging, problem solving and writing clear code.
Prerequisite: None
Corequisite: None

CPTR 1100 Fundamental Computer Concepts 1 0/1/0
This course provides a general overview of the frequently used functions of a personal computer. Computer hardware, operating systems, electronic mail, Internet and a brief introduction to an office software package will be covered.
Prerequisite: None
Corequisite: None

CPTR 1102 Introduction to Macintosh 3 2/1/0
This course covers the operation of Macintosh computer hardware and software, the Macintosh operating system and an introduction to Microsoft Office Suite software.
Prerequisite: None
Corequisite: None

CPTR 1104 Introduction to Computer Technology 3 2/1/0
This course covers the operation of personal computer hardware and software. It provides an overview of a personal computer operating system and word processing, spreadsheet, presentation, email, scheduling, Internet and database management software.
Prerequisite: None
Corequisite: None

CPTR 1106 Microcomputer Databases 3 2/1/0
This course covers database concepts, design and construction using the latest database software. Topics include database normalization and table relationships, database objects, file creation, file manipulation, queries, macros, form development and report generation. Database programming concepts will also be introduced.
Prerequisite: None
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

CPTR 1108 CISCO I 3 1/2/0
This is an introduction to networking. This course covers a network model, basic networking math, basic network devices and an introduction to network design.
Prerequisite: None
Corequisite: None

CPTR 1110 Visual Basic Program I 3 2/1/0
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: None
Corequisite: None

CPTR 1112 Visual Basic Program II 3 2/1/0
This course is the second and final course in the BASIC programming language. Topics include looping, menus, arrays, subroutines, sorting, strings and files.
Prerequisite: CPTR1110
Corequisite: None

CPTR 1115 COBOL Programming 4 3/1/0
This course provides 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: None
Corequisite: None

CPTR 1118 CISCO II 3 2/1/0
This course covers additional OSI layer topics, network routing and auditing. Students learn and practice accepted router configuration procedures.
Prerequisite: CPTR1108 OR CSCI1205
Corequisite: None

CPTR 1122 Microcomputer Maintenance 3 1/2/0
This course covers the operation, diagnosis, troubleshooting and basic repair of microcomputer components. Topics include hardware compatibility, system architecture, memory, input devices, video displays, disk drives, modems and printers.
Prerequisite: None
Corequisite: None

CPTR 1125 IT Essentials I 3 1/2/0
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: None
Corequisite: None

CPTR 1129 RPG Programming 4 2/2/0
This course is an introduction to RPG programming and AS400 system operations. 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 strong 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.
Prerequisite: None
Corequisite: None

CPTR 1130 IT Essentials II 3 1/2/0
This is an advanced course for computer hardware, including desktop and laptop personal computers, operating systems, basic IT security and basic networking fundamentals.Topics covered include computer hardware and operating system configurations, building a basic network, networking technologies and protocols, and preventive maintenance and troubleshooting of information technology hardware, software, security and networked devices.
Prerequisite: CPTR1125
Corequisite: None

CPTR 1135 Beginning Networking 3 2/1/0
This is an introductory networking course designed to expose the student to various components of networking in both home and enterprise settings. Topics covered include various network types, how networks communicate and current networking practices. Wired and wireless networks will be discussed, along with their various layouts and required components. The student also will learn basic best practices for network security and network management.
Prerequisite: None
Corequisite: None

CPTR 1138 Information Systems 3 2/1/0
This course is an introduction to information systems. Topics include an overview of data communications and information systems used in a variety of organization types, network hardware, software, topologies and resources, hardware and communications standards, and the systems development life cycle.
Prerequisite: None
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

CPTR 1142 Network Essentials 3 2/1/0
This course gives students both the knowledge and hands-on skills necessary to work with network operating systems in a network administration environment.
Prerequisite: None
Corequisite: None

CPTR 1148 Microcomputer Operating System 3 1/2/0
This course covers basic information about computer hardware and software and the use of the Windows operating system. Topics include file management techniques, utilizing common screen elements, multitasking, object linking and customizing the desktop.
Prerequisite: None
Corequisite: None

CPTR 1166 Word Processing and Spreadsheets 4 2/2/0
This course covers the basics of word processing and spreadsheet concepts, development and use.
Prerequisite: None
Corequisite: None

CPTR 1170 Web Engineering I 3 2/1/0
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: None
Corequisite: None

CPTR 1178 Robotics 3 2/1/0
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 programing environment. Along with reading current literature about robotics, this class provides the student the fundamentals of robotics.
Prerequisite: None
Corequisite: None

CPTR 2000 Mobile Application Development 3 2/1/0
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: CPTR2242 OR CSCI2010
Corequisite: None

CPTR 2200 CISCO III 3 2/1/0
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: CPTR1118
Corequisite: None

CPTR 2208 CISCO IV 3 2/1/0
This course covers WAN configuration and remote access configuration. Students will practice design and configuration of systems to solve WAN and remote access problems.
Prerequisite: CPTR2200
Corequisite: None

CPTR 2210 Database Report Generation 3 2/1/0
Students will be introduced to database reporting using commonly used tools. Examples include Microsoft Structured Query Language (SQL) Reporting Services, comma-separated values (CSV), Microsoft Access and Excel, and Crystal Reports. Students will understand ethical and security concerns and challenges of database reporting. This course will cover the best practices of database reporting and help students understand business requirements behind database reporting.
Prerequisite: CPTR1106
Corequisite: None

CPTR 2220 COBOL Programming II 3 2/1/0
This is the second course in COBOL programming language. Topics include sorting, table processing, data manipulation, control break processing, sequential file maintenance, and indexed and relative files.
Prerequisite: CPTR1114
Corequisite: None

CPTR 2224 Linux I 3 2/1/0
This course deals with Linux installation, configuration and system administration. This course lays the groundwork for continued study of Linux.
Prerequisite: None
Corequisite: None

CPTR 2228 RPG/OS400 II 4 2/2/0
This course is a continuation of the RPG/OS400 I course with more advanced RPG programming and OS400 operations introduced. A strong emphasis will be put on developing screen programs that call one another and pass parameters between them. A large programming project will be given students at mid-semester in which they will develop many programs that are related and dependent on each other.
Prerequisite: CPTR1128
Corequisite: None

CPTR 2230 Structured Query Language 3 2/1/0
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 3 2/1/0
The primary focus of this course is Linux networking, security, ethics and privacy.
Prerequisite: CPTR2224
Corequisite: None

CPTR 2236 Network Security 3 2/1/0
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 3 2/1/0
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 3 2/1/0
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 3 2/1/0
In this course the student utilizes the Java programming language to create both Internet applets and applications.
Prerequisite: None
Corequisite: None

CPTR 2245 Enterprise Network Technologies 3 2/1/0
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 3 0/0/3
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 3 1/2/0
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 3 2/1/0
Students will build upon the skills learned in the Structured Query Language (SQL) class. This course takes on more advanced but 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 3 2/1/0
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 3 2/1/0
This course teaches functions of a network operating system so the student can effectively maintain and manage 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 2275 Data Analytics 3 2/1/0
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 MATH1213
Corequisite: None

CPTR 2282 E-mail Administration 3 2/1/0
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 3 0/0/3
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 3 1/2/0
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 3 2/1/0
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 3 3/0/0
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 3 3/0/0
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 3 3/0/0
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 objectives.
Prerequisite: None
Corequisite: None

CRJU 1106 Introduction to Corrections/Probation 3 3/0/0
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 3 2/1/0
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 3 3/0/0
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

crimes, victims, ethics and human behavior.
Prerequisite: None
Corequisite: None

CRJU 1117 Special Topics in Criminal Justice 3 3/0/0
This course looks at a variety of contemporary issues that are considered to be hot spots in law enforcement and criminal justice such as police pursuits, deadly force, gangs, terrorism, etc. Applicable Minnesota Police Officer Standards and Training Board learning objectives are also covered.
Prerequisite: None
Corequisite: None

CRJU 2201 Criminal Law 3 3/0/0
This is a course in substantive law, including the elements of major crimes and possible legal defenses. This course also familiarizes students with the Minnesota criminal statutes focusing on Minnesota Police Officer Standards and Training Board objectives.
Prerequisite: None
Corequisite: None

CRJU 2202 Criminal Procedures 3 3/0/0
This course covers the study of constitutional law and criminal procedures utilizing the opinions of the United States Supreme Court and the Minnesota rules of criminal procedure. Emphasis is placed on the constitutional guidelines for law enforcement, rules of arrest, search and seizure, and the Minnesota Rules of Criminal Procedure. Minnesota Police Officer Standards and Training Board learning objectives relating to criminal procedure are also covered.
Prerequisite: None
Corequisite: None

CRJU 2206 Police Report Writing 3 3/0/0
This course provides the technical understanding and practical application in basic police report writing, field note taking and standardized report forms commonly used by law enforcement. Emphasis is placed on developing a clear, concise style in expressing factual, relevant information in an acceptable format relevant to criminal case procedures. Minnesota Police Officer Standards and Training Board learning objectives for police report writing are also covered.
Prerequisite: ENGL1101 OR GSCO1102
Corequisite: None

CRJU 2209 Criminal Investigations 3 3/0/0
This course covers the methodology of criminal investigations from the preliminary investigation to the court proceedings. It also covers evidence recognition, collection and preservation. Police reporting relevant to investigations is also covered, along with all Minnesota Police Officer Standards and Training Board learning objectives relating to investigation of crime.
Prerequisite: None
Corequisite: None

CRJU 2210 Introduction to Criminalistics 3 2/1/0
This is an introduction to the principles involved in the application of scientific and technical methods used in the discovery, review and evaluation of physical evidence. The interpretation of evidence and the linkage to suspects is also covered. Minnesota Police Officer Standards and Training Board learning objectives for collection and preservation of evidence are also covered.
Prerequisite: None
Corequisite: None

CRJU 2235 Criminal Justice Internship 3 0/0/3
This is a practical learning experience in criminal justice in the area of the student's interest. This course is usually scheduled after the student has completed one full year of coursework.
Prerequisite: None
Corequisite: None

CSCI 1101 Computer Essentials 1 1/0/0
This course is intended for those with minimal or no computer skills. Basic computer hardware and software terminology and the basics of microcomputer operating systems will be covered, as well as Internet and email operations. In addition, introductory word processing skills will be taught using one of the industry's common word processing packages. No credit given if taken after another computer course.
Prerequisite: None
Corequisite: None

CSCI 1110 Informatics 3 3/0/0
This course explores how data is gathered and analyzed and how it can be applied to information technology solutions to maximize the benefits of data analysis, including increases in the efficiency and productivity of information systems. Students will explore the social, ethical and personal implications of implementing information technologies and how information processes can impact business on a local and global level.
Prerequisite: None
Corequisite: None

CSCI 1121 Computer Science I 4 4/0/0
This course is an introduction to computer science. It includes algorithm design and structured programming using a high-level programming language. Key components of this course are designing, coding, debugging and documenting programs using techniques of good programming style. This course is intended primarily as a first course for computer science majors and/or minors.
Prerequisite: None
Corequisite: None

CSCI 1122 Computer Science II 4 4/0/0
This course focuses on advanced programming concepts including an introduction to data structures, analysis of algorithms, recursion, searching, sorting and memory management.
Prerequisite: CSCI1121
Corequisite: None

CSCI 1155 Computer Utilization in Business & Society 3 3/0/0
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 spreadsheets, databases and presentations. Students will use the Internet and electronic mail on a regular basis.
Prerequisite: None
Corequisite: None

CSEC 1102 Careers in Information Systems 1 1/0/0
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.
Prerequisite: None
Corequisite: None

CSEC 1110 Fundamentals of IT Security 3 2/1/0
This course introduces the basics of network security. The student will be introduced to network vulnerabilities and threats and how to safeguard computer networks from those vulnerabilities and threats. This course will expose the student to network security planning, network security technology, network security organization and legal and ethical issues associated with network security.
Prerequisite: None
Corequisite: None

CSEC 2202 Introduction to Wireless Networking 3 2/1/0
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.
Prerequisite: None
Corequisite: None

CSEC 2204 Managing Directory Services 3 2/1/0
This course is designed to further students' understanding of directory services. Directory services provide a central repository for the information available on 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.
Prerequisite: CPTR2272
Corequisite: None

CSEC 2210 Security Breaches and Countermeasures 3 2/1/0
This course introduces the student to the 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.
Prerequisite: CPTR2236
Corequisite: None

CSEC 2212 Web Security 3 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.
Prerequisite: CPTR2224 AND CPTR2272
Corequisite: None

CSEC 2214 Topics in Network Security 3 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.
Prerequisite: CPTR2236
Corequisite: None

CSEC 2218 Disaster Recovery 2 1/1/0
This course includes 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.
Prerequisite: None
Corequisite: None

CSEC 2222 Network Security Design 3 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

mode of the security design, attack methodology, tools and techniques.
Prerequisite: CSEC2204
Corequisite: CSEC2210

CSEC 2228 Network Defense 3 2/1/0
This course introduces students to the various methodologies for defending the information technology network infrastructure. Students will be introduced to the concepts, principles, type and topologies of firewalls to include packet filtering, proxy firewalls, application gateways, circuit gateways and stateful inspection.
Prerequisite: CPTR2236
Corequisite: None

CTEC 2204 Advanced Technical Support 3 2/1/0
This course will emphasize advanced technical support topics such as project management, product development, software evaluation and selection, technical writing and end-user training. Students will apply their technical knowledge and experience to actual case studies.
Prerequisite: ITSS1100
Corequisite: None

CTEC 2240 Technical Support Internship 3 0/0/3
This is a hands-on course in a computer industry setting. The student will apply skills, knowledge and behaviors acquired in prior courses to the computer business situation. The student will provide phone and/or direct support to computer customers and gain a working knowledge of the technical analyst position.
Prerequisite: None
Corequisite: None

CULN 1102 Introduction to Foodservice Preparation 4 4/0/0
This course covers terminology, equipment, basic food products and cooking techniques and kitchen safety.
Prerequisite: None
Corequisite: None

CULN 1104 Stocks, Sauces and Soups 2 2/0/0
This course introduces the student to the basic knowledge and techniques for making soups, stocks and sauces used in a commercial food operation.
Prerequisite: None
Corequisite: None

CULN 1106 Culinary Foundations Lab A 6 0/6/0
This course covers the hands-on application and practice of the basic skills required to prepare a variety of salads, cold sauces, cold sandwiches, breads and rolls, and dessert and pastry items commonly used in food service operations.
Prerequisite: None
Corequisite: None

CULN 1112 Poultry and Seafood 3 3/0/0
This course is an introduction to poultry, fish and seafood from basic classifications to preparation methods, handling techniques, market forms and accompaniments.
Prerequisite: None
Corequisite: None

CULN 1118 Cafe Lunch Foundations 5 0/5/0
This course provides the opportunity for hands-on application of the skills required in various stations worked by a line cook in the preparation of menu items typical of a commercial food service operation.
Prerequisite: None
Corequisite: None

CULN 1120 Kitchen Math, Formulas and Spreadsheets 1 1/0/0
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 commonly applied in spreadsheets used by commercial food operations.
Prerequisite: None
Corequisite: None

CULN 1122 Sanitation Certification 1 1/0/0
This course covers food safe basics through handling procedures, food storage, cleaning, sanitizing, purchasing and receiving. This course follows the Food and Drug Administration (FDA) Model Food Code, and students will test for the National Restaurant Association (NRA) ServSafe Certification exam at the conclusion of the class.
Prerequisite: None
Corequisite: None

CULN 1124 Menu Concept and Design 2 2/0/0
This course is a systematic approach to developing menus for a well-defined concept or themed food operation. The course also examines the application of food service marketing principles to define a target customer and create cohesive menu designs, copy and delivery methods which reflect the chosen concept or theme.
Prerequisite: None
Corequisite: None

CULN 1200 Fundamentals of Baking and Pastry 6 0/6/0
This course exposes the student to the preparation of various foods associated with the baking and pastry area in food service. The course provides the student with practical hands-on applications and skills commonly found in the baking and pastry area of a commercial kitchen.
Prerequisite: None
Corequisite: None

CULN 1205 Theories of Baking and Pastry 2 2/0/0
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.
Prerequisite: None
Corequisite: None

CULN 1210 Fundamentals of Food Fabrication and Production 6 0/6/0
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.
Prerequisite: None
Corequisite: None

CULN 1215 Theory of Food Fabrication and Production 2 2/0/0
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.
Prerequisite: None
Corequisite: None

CULN 1220 Fundamentals of Pantry Production 3 0/3/0
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.
Prerequisite: None
Corequisite: None

CULN 1230 Introduction to Professional Food Service 4 4/0/0
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.
Prerequisite: None
Corequisite: None

CULN 1240 Sanitation Certification 2 2/0/0
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.
Prerequisite: None
Corequisite: None

CULN 1250 Kitchen Math and Measurements 1 1/0/0
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.
Prerequisite: None
Corequisite: None

CULN 1260 Meats 3 3/0/0
This course is an introduction to poultry, fish and seafood from basic classifications to preparation methods, handling techniques, market forms and accompaniments.
Prerequisite: None
Corequisite: None

CULN 1270 Culinary Nutrition 2 0/2/0
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.
Prerequisite: None
Corequisite: None

CULN 2202 Meats 2 2/0/0
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.
Prerequisite: None
Corequisite: None

CULN 2204 Cafe Breakfast Foundations 5 0/5/0
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.
Prerequisite: None
Corequisite: None

CULN 2206 Buffet Presentation and Production 3 0/3/0
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.
Prerequisite: None
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

CULN 2214 Culinary Foundations Lab B 6 0/6/0
The course covers hands-on application and continued practice of cooking fundamentals required to prepare a variety of soups, meats and poultry, starches, vegetables and sauces served in the cafe. This course also covers hands-on application of raw and cooked meat, 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 to manage and oversee production in a commercial food operation. It includes application of learned skills in the areas of production, supervising, menu writing, purchasing, storeroom operation 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 methods and 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 of various 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 cake and 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 has been learned in the classroom and practiced in the lab. The internship will take place in a commercial 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 and wood 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 task analysis and safety design including ergonomics, job and system safety, empowering employees, and training employees for safe practices. Participants will discuss 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 the role of the cardiovascular technologist in various settings. Students in this course will incur 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 Assistive 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 Assistive 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 Cardiovacular 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 and neurovascular systems, and renal regulation of blood pressure. The pathophysiology of these systems is examined in order to understand and apply treatment modalities in the cardiovascular 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 1130 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 cardiovascular complications and emergencies, prepare and position patients for various procedures, and set up and maintain sterile fields. Students will learn concepts related to hemodynamics including cardiac output, performance of hemodynamic calculations and recognition 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 peripheral vascular, neurovascular, congenital and pediatric conditions, and complications and emergencies.
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.
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 CVR2130

CVRI 2250 Radiation Safety 2 1/1/0
Students in this course will demonstrate safety related to the use of radiation during catheterization procedures. Students will learn x-ray tube components, x-ray production, characteristics and physics. Students will learn to position patients, 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 gained throughout the Cardiovascular Technology program. Students will become certified in Advanced Cardiac Life Support (ACLS) before being assigned to various cardiovascular catheterization 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 gained throughout the Cardiovascular Technology program. 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 Advanced Cardiac Life Support (ACLS) AND current American Heart Association Health Care Provider CPR AND current, clear Minnesota Department of Health criminal background check AND current, clear national background check AND up-to-date immunizations.
Corequisite: CVRI2262

CVRI 2264 Cardiovascular Technology Practicum III 5 0/0/5
In part three of this capstone course, students will apply the knowledge and skills gained throughout the Cardiovascular Technology program. 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 Advanced Cardiac Life Support (ACLS) AND current American Heart Association Health Care Provider CPR 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: CVRI2262 AND CVRI2263

DCNH 1116 CNH (Case New Holland) 3 0/0/3
Supervised Occupational Experience (SOE) I
Students will apply skill sets previously learned specific to Case New Holland 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.
Prerequisite: None
Corequisite: None

DCNH 1118 CNH (Case New Holland) 7 0/0/7
Supervised Occupational Experience (SOE) II
Students will apply skill sets previously learned specific to Case New Holland 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.
Prerequisite: None
Corequisite: None

DCNH 2210 Mobile Hydraulics 4 1/3/0
This course covers the hydraulic components specific to Case New Holland farm and heavy equipment. This will include hydrostatic transmission, electric over hydraulic control valves and electronic control components. It will also include troubleshooting of live units with proper testing equipment used in up-to-date service centers.
Prerequisite: DSET1112 AND DSET1100
Corequisite: None

DCNH 2218 CNH (Case New Holland) 3 0/0/3
Supervised Occupational Experience (SOE) III
Students will apply skill sets previously learned specific to Case New Holland 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.
Prerequisite: None
Corequisite: None

DCNH 2230 Advanced Engines and Fuel Systems I 3 1/2/0
This course is designed to give the student an understanding of the theory, operation, troubleshooting and repair of diesel engine intake, exhaust and fuel systems used in CNH equipment.
Prerequisite: None
Corequisite: None

DCNH 2238 Transmissions and Drive Systems 4 1/3/0
This course covers procedures to test, troubleshoot and rebuild power shift and other specialized transmissions used on agricultural equipment and industrial powered equipment as related to Case New Holland equipment. This course also includes final drives and related components including removal, repair, installation and adjustment of major units and components.
Prerequisite: DSET1110
Corequisite: None

DCNH 2242 Advanced Engines and Fuel Systems 6 2/4/0
This course is designed to give students an understanding of medium- and heavy-duty diesel engines used in Case New Holland equipment. Engines being studied include but are not limited to Cummins, Iveco, International Harvester and New Holland. Areas of study include base engine components, intake and exhaust systems, emission control devices, lubrication systems, cooling systems and fuel systems.
Prerequisite: DSET1132 AND DSET1134
Corequisite: None

DENT 1100 Biomaterials 3 2/1/0
This is a foundation course that provides in-depth instruction and practice in identifying the materials and their purposes and properties as they are used during chairside and laboratory procedures. Material manipulation is a critical requirement of the lab component of this course. Laboratory safety measures and infection control are emphasized.
Prerequisite: None
Corequisite: None

DENT 1102 Dental Anatomy 2 2/0/0
The lecture portion of the course introduces the student to basic terminology for 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 2 1/1/0
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 1 1/0/0
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 3 3/0/0
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 asepsis 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 1 1/0/0
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 2 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 2 1/1/0
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 3 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 3 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 3 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 and under the supervision of a licensed nurse.
Prerequisite: DIAT1100 AND DIAT1105 AND DIAT1110 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 6 3/3/0
This course includes an orientation to the history of dentistry, educational requirements,

credentialing opportunities and professional associations for dental and allied dental careers. The student is provided with instruction in the use of dental equipment, instruments and supplies; principles of four-handed dentistry; concepts of infection control and instrument recirculation; management of medical and dental emergencies; and procedures related to oral diagnosis, preventive dentistry and restorative dentistry.
Prerequisite: None
Corequisite: None

DNAS 1105 Clinical Assisting II 5 1/4/0
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.
Prerequisite: DNAS1103
Corequisite: None

DNAS 1106 Biodental Science 3 3/0/0
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.
Prerequisite: None
Corequisite: None

DNAS 1114 Dental Practice Management 2 2/0/0
This course provides the student with instruction in the principles and applications that are related to the management of a dental office. Emphasis is placed on managing patient records through computer-generated charting, financial records, third-party payments, appointment scheduling, inventory and recall systems.
Prerequisite: None
Corequisite: None

DNAS 1119 Advanced Functions 5 2/3/0
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.
Prerequisite: DNAS1103
Corequisite: None

DNAS 1144 Dental Assisting Clinical Affiliations 6 0/0/6
This 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.
Prerequisite: Acceptance into the dental assisting program.
Corequisite: None

DNAS 1210 Radiology Lab 1 0/1/0
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, 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.
Prerequisite: None
Corequisite: DENT1106

DNAS 1212 Radiology Lab II 1 0/1/0
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.
Prerequisite: DNAS1210
Corequisite: None

DNAS 1215 Dental Specialties 1 1/0/0
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.
Prerequisite: None
Corequisite: None

DNHY 1104 Dental Anatomy Lab 1 0/1/0
This is a lab course which 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.
Prerequisite: None
Corequisite: None

DNHY 1106 Head and Neck Anatomy 2 2/0/0
This course covers the study of hard and soft tissues of the head and neck including the skeletal, muscular and nervous systems, with particular emphasis on the masticatory system.
Prerequisite: Acceptance into the dental hygiene program
Corequisite: None

DNHY 1108 Oral Histology and Embryology 2 2/0/0
This course covers the study of the microscopic anatomy of the oral tissues and the embryonic development of the face and oral cavity with emphasis on the masticatory system.
Prerequisite: None
Corequisite: None

DNHY 1109 Radiology Lab 2 0/2/0
This course puts into practice knowledge gained from DNHY 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 process, mount and 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 their efficiency and quality of their radiographic techniques.
Prerequisite: None
Corequisite: None

DNHY 1110 Principles I 2 2/0/0
This course introduces the student to dental hygiene with emphasis on theory of preventative dentistry, OSHA standards, disinfectant/sterilants, formation of plaque and calculus, patient assessment and an introduction to the caries process and periodontal assessment.
Prerequisite: None
Corequisite: None

DNHY 1112 Dental Hygiene Practice I 3 0/3/0
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.
Prerequisite: None
Corequisite: None

DNHY 1118 Oral Pathology 2 2/0/0
This course covers the study of general processes as well as oral disease processes. Special emphasis is placed on clinical and radiographic recognition of pathology of the oral cavity.
Prerequisite: Accepted into the dental hygiene program and successful completion of Principles I, II, III; Head and Neck Anatomy; and Oral Histology and Embryology
Corequisite: None

DNHY 1119 Dental Hygiene Principles II 4 4/0/0
This course is a continuation of DNHY 1110 with continuing information on the fundamentals of dental hygiene, record keeping and basic instruction and care of special needs patients.
Prerequisite: DNHY1110
Corequisite: None

DNHY 1123 Dental Hygiene Practice II 5 0/5/0
This course is a continuation of DNHY 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.
Prerequisite: DNHY1112
Corequisite: None

DNHY 1124 Pain Control Lab 2 0/2/0
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.
Prerequisite: DNHY1106 AND DNHY1136
Corequisite: None

DNHY 1130 Dental Hygiene Principle III 1 1/0/0
This course is a continuation of DNHY1119 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.
Prerequisite: DNHY1123
Corequisite: None

DNHY 1132 Dental Hygiene Practice III 1 0/1/0
This lab course is a continuation of DNHY1123 with emphasis on Minnesota Board of

Dentistry allowable procedures for dental hygienists.
Prerequisite: DNHY1123
Corequisite: None

DNHY 1136 Dental Pharmacology 2 2/0/0
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.
Prerequisite: None
Corequisite: None

DNHY 2210 Dental Hygiene Principle IV 2 2/0/0
This course is 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.
Prerequisite: DNHY1130
Corequisite: None

DNHY 2213 Dental Hygiene Practice IV 6 0/6/0
This course is a continuation of DNHY1132 with emphasis on the treatment of moderate to advanced periodontal disease, the development of speed and an introduction to several advanced dental hygiene techniques.
Prerequisite: DNHY1132 AND The student must be accepted into the dental hygiene program and comply with the Dental Program Student/Faculty Handbook.
Corequisite: DNHY2240

DNHY 2219 Periodontology 2 2/0/0
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.
Prerequisite: None
Corequisite: None

DNHY 2220 Dental Hygiene Principle V 1 1/0/0
This course is a continuation of DNHY2210 and dental hygiene patient oral risk assessments. Special focus includes topics of interest to the graduating hygienist including smoking cessation, extraoral/ intraoral self exam, resume writing, interview skills, professional development, service to the community and involvement in the professional association.
Prerequisite: DNHY2210
Corequisite: None

DNHY 2223 Dental Hygiene Practice V 6 0/6/0
This course is a continuation of DNHY2213 with emphasis on the treatment of moderate to advanced periodontal disease, the development of speed and an introduction to several advanced dental hygiene techniques.
Prerequisite: DNHY2213 AND The student must be accepted into the dental hygiene program and comply with the Dental Program Student/Faculty Handbook.
Corequisite: DNHY2246

DNHY 2226 Community Dental Hygiene 4 3/1/0
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.
Prerequisite: None
Corequisite: None

DNHY 2232 Dental Hygiene Review 1 1/0/0
This course is designed to assist students in reviewing content in preparation to write the National Board Dental Hygiene Examination.
Prerequisite: DNHY2213
Corequisite: None

DNHY 2240 Clinical Affiliation I 1 0/0/1
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.
Prerequisite: None
Corequisite: DNHY2213

DNHY 2246 Clinical Affiliation II 1 0/0/1
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.
Prerequisite: None
Corequisite: DNHY2223

DSET 1100 Diesel Equipment Fundamentals 2 1/1/0
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.
Prerequisite: None
Corequisite: None

DSET 1101 Software Systems in Transportation 2 1/1/0
This course introduces students to proprietary software used in the diesel technology industry. Students will become familiar with various software from industry-leading manufacturers.
Prerequisite: None
Corequisite: None

DSET 1106 Fuel Systems 2 1/1/0
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.
Prerequisite: None
Corequisite: None

DSET 1110 Power Train I 3 1/2/0
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.
Prerequisite: TRNS1102 OR DSET1100
Corequisite: None

DSET 1112 Hydraulics I 4 2/2/0
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.
Prerequisite: None
Corequisite: None

DSET 1114 Vehicle Brakes 3 1/2/0
This course covers hydraulic and air brake system operation, service and diagnosis. Anti-lock braking systems will also be covered.
Prerequisite: None
Corequisite: None

DSET 1116 Fall Supervised Occupational Experience 3 0/0/3
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.
Prerequisite: None
Corequisite: None

DSET 1124 Diesel Shop Management 1 1/0/0
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.
Prerequisite: None
Corequisite: None

DSET 1130 Trans Elec/Start/Charge 4 2/2/0
This course is an introduction to electrical systems. 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.
Prerequisite: None
Corequisite: None

DSET 1132 Introduction to Engine Theory 2 2/0/0
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.
Prerequisite: None
Corequisite: None

DSET 1134 Introduction to Engines 3 0/3/0
This course teaches students how to disassemble, analyze, rebuild, measure and adjust diesel engines and their components.
Prerequisite: None
Corequisite: None

DSET 1140 Supervised Occupational Experience I 7 0/0/7
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.
Prerequisite: None
Corequisite: None

DSET 1144 Electrical Troubleshooting 3 1/2/0
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.
Prerequisite: DSET1130
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

DSET 2204 Advanced Electrical and Emission Systems 3 1/2/0
This course covers failure analysis of electrical systems, the recognition of causes of failures and how to interpret a wiring diagram. Lab activities include the troubleshooting of heavy-duty electrical and emission components, testing, inspecting and repair. Electrical meters will be used to diagnose, locate and repair failures. Lab work may include diagnosis, disassembly, inspection, repair, assembly and testing of program and customer-owned equipment.
Prerequisite: DSET1100 AND DSET1130
Corequisite: None

DSET 2206 Electronic Controls 3 1/2/0
This course covers electronic components used to control engines, transmissions, brakes and hydraulics used in modern equipment. The coursework will include system analysis, testing, troubleshooting and replacement of components used in electronic control systems.
Prerequisite: DSET1130 AND TRNS1102 OR DSET1100 AND DSET1130
Corequisite: None

DSET 2210 Mobile Hydraulics 4 1/3/0
This course covers the hydraulic components used in farm and heavy equipment and trucks. This will include hydrostatic transmission, electric over hydraulic control valves and electronic control components. It will also include troubleshooting of live units with proper testing equipment used in up-to-date service centers.
Prerequisite: DSET1112 AND DSET1100
Corequisite: None

DSET 2214 Suspension and Alignment 3 1/2/0
This course will cover the procedures used in repair, inspection, rebuilding and alignment of steering and suspension systems. Vehicle Department of Transportation inspections will also be covered.
Prerequisite: DSET1100
Corequisite: None

DSET 2218 Advanced Fuels 3 1/2/0
This course covers the application of the electronic fuel systems used on today's diesel engines. Coursework covers fuel systems used on engines manufactured by Caterpillar, Cummins, Detroit, John Deere, CNH and others.
Prerequisite: DSET1106
Corequisite: None

DSET 2220 Internship 3 0/0/3
This course is designed by the student and advisor in cooperation with industry to provide a job site training experience. The student will prepare an internship training plan reflecting skills to be developed on the internship site.
Prerequisite: TRNS1102 AND TRNS1106 AND TRNS1110 OR DSET1100
Corequisite: None

DSET 2230 Advanced Engines & Fuel Systems I 3 1/2/0
This course is designed to give the student an understanding of the theory, operation, troubleshooting and repair of diesel engine intake, exhaust and fuel systems including but not limited to Caterpillar, Cummins and Detroit diesel engines.
Prerequisite: None
Corequisite: None

DSET 2238 Transmissions & Drive Systems 4 1/3/0
This course covers procedures to test, troubleshoot and rebuild power shift and other specialized transmissions used on agricultural, industrial and diesel trucks. This course also includes final drives and related components including removal, repair, installation and adjustment of major units and components.
Prerequisite: DSET1110
Corequisite: None

DSET 2240 Supervised Occupational Experience II 3 0/0/3
Students will apply skill sets previously learned related to truck and/or other diesel-powered equipment. Skill sets will be identified in a training plan developed by industry and instructor.
Prerequisite: None
Corequisite: None

DSET 2242 Advanced Engines and Fuel Systems 6 2/4/0
This course is designed to give students an understanding of medium- and heavy-duty diesel engines manufactured by, but not limited to, Caterpillar, Cummins, Detroit Diesel, Navistar, Volvo and Mercedes Benz. Areas of study include base engine components, intake and exhaust systems, emission control devices, lubrication systems, cooling systems and fuel systems.
Prerequisite: DSET1134 AND DSET1132
Corequisite: None

DTRK 1140 Supervised Occupational Experience 1 7 0/0/7
Students will apply skill sets previously learned related to medium- and heavy-duty trucks at a sponsoring dealer or fleet shop. Students 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.
Prerequisite: None
Corequisite: None

DTRK 2214 Suspension and Alignment 3 1/2/0
This course will cover the procedures used in repair, inspection, rebuilding and alignment of steering and suspension systems. Vehicle Department of Transportation inspections will also be covered.
Prerequisite: TRNS1102 OR DSET1100
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

DTRK 2230 Advanced Engines I 3 1/2/0
This course is designed to give the student an understanding of the theory, operation, troubleshooting and repair of modern medium- and heavy-duty truck diesel engines. Areas of study include intake and exhaust systems, emission control devices and fuel systems on but not limited to the following manufacturers: Caterpillar, Cummins, Detroit, Navistar, Mack and Volvo truck diesel engines.
Prerequisite: None
Corequisite: None

DTRK 2238 Transmissions and Drive Systems 4 1/3/0
This course is designed to give the student an understanding of the theory, operation, troubleshooting and repair of modern medium- and heavy-duty truck transmission, differential and driveline components. Areas of study include the operation, inspection, disassembly and assembly of various manufacturers including but not limited to Allison, Eaton, Meritor, Rockwell and Mack.
Prerequisite: DSET1110
Corequisite: None

DTRK 2240 Supervised Occupational Experience II 4 0/0/4
Students will apply skill sets previously learned related to medium- and heavy-duty trucks at a sponsoring dealer or fleet shop. Skill sets will be identified in a training plan developed by industry and instructor.
Prerequisite: None
Corequisite: None

DTRK 2242 Advanced Engines and Fuel Systems 6 2/4/0
This course is designed to give the student an understanding of the theory, operation, troubleshooting and repair of modern medium- and heavy-duty truck diesel engines. Areas of study include base engine components, intake and exhaust systems, emission control devices, lubrication systems, cooling systems and fuel systems on but not limited to the following manufacturers: Caterpillar, Cummins, Detroit, Navistar, Mack and Volvo truck diesel engines.
Prerequisite: DSET1132 AND DSET1134
Corequisite: None

EAP 0095 Editing Strategies I 2 2/0/0
This course is for students in their first semester of study in the English for Academic Purposes (EAP) cohort and enrolled in ENGL0097: Express English. The course will focus on helping students identify specific patterns of error in their writing and apply strategies for increasing sentence-level accuracy.
Prerequisite: Course placement is determined by assessment
Corequisite: ENGL0097

EAP 0096 Reading Strategies I 2 2/0/0
This course is for students in their first semester of study in the English for Academic Purposes (EAP) cohort and pairs with an academic content course. Students will learn specific strategies for building vocabulary, taking notes and analyzing texts from a specific field.
Prerequisite: Course placement is determined by assessment
Corequisite: Enrollment in paired MnTC course is required for students registering for this course

EAP 0097 Reading Strategies II 2 2/0/0
This course is for students in their second semester of study in the English for Academic Purposes (EAP) cohort and pairs with a content course. Students will continue to develop language skills necessary to read and understand field-specific texts.
Prerequisite: EAP0096 AND Course placement is determined by assessment
Corequisite: Enrollment in paired MnTC course is required for students registering for this course

EAP 0098 Editing Strategies II 2 2/0/0
This course is for students in their second semester of study in the English for Academic Purposes (EAP) cohort and enrolled in ENGL1101: College Writing. The course will continue student development of editing skills as well as build a strong foundation of research skills, including the critical analysis of sources. Students will write responses to sources: summarizing, paraphrasing and quoting materially responsibly.
Prerequisite: EAP0095
Corequisite: ENGL1101

ECON 1150 Essentials of Economics 3 3/0/0
Meets MnTC Goal Areas 2 and 5. This course is an introductory study of economics and exposes the student to a variety of economic concepts. In order to enjoy a successful career, people need to understand how economics impacts the environment in which they live and work. This course helps satisfy those needs by exploring the principles of microeconomics, macroeconomics and international economics. At the microeconomic level, students will learn how the choices they make affect particular markets. They will examine resource allocation and pricing structure by analyzing demand and supply applications. Students will survey the competitive environment by exploring the market structures of perfect competition, monopolistic competition, monopoly and oligopoly. At the macroeconomic level, students will learn about the business cycle by analyzing the gross domestic product (GDP), the inflation rate, the unemployment rate, deficit spending, the national debt and other economic indicators. They will also investigate the debate over activism and non-activism in monetary and fiscal policies. Finally, the student will examine international issues including tariffs/quotas, foreign exchange, the concept of comparative advantage and trends in globalization. This course is not intended for business or economics majors.
Prerequisite: None
Corequisite: None

ECON 2210 Macroeconomics 3 3/0/0
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

ECON 2222 Microeconomics 3 3/0/0
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

ED 2205 Introduction to Education and Technology 2 2/0/0
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

ED 2206 Early Field Experience 1 0/0/1
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

ED 2294 Educational Psychology 3 3/0/0
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

EDUC 1112 Job Search Skills 1 1/0/0
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

EDUC 1113 Career and Life Planning 2 2/0/0
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

ELEC 1100 Electrical Safety 1 1/0/0
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

ELEC 1102 Introduction to Electric Circuit Theory 4 2/2/0
This introductory 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

ELEC 1104 Introduction to National Electrical Code 2 2/0/0
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

ELEC 1107 Introduction to Residential Wiring 3 1/2/0
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

ELEC 1108 Electrical Circuit Theory 4 2/2/0
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

ELEC 1110 Electric Motors and Generators 4 2/2/0
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

ELEC 1112 Residential Wiring 3 1/2/0
This course provides students with expanded technical understanding and skills 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

ELEC 1114 National Electrical Code 2 2/0/0
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

ELEC 1115 Solar Photovoltaic Installation 1 1/0/0
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

ELEC 1116 Conduit/Tool Applications 2 0/2/0
Numerous applications and skills will be developed in this course including bending, 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

ELEC 1118 Electrical Services 3 2/1/0
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

ELEC 1122 Introduction to Electrical Materials 1 0/1/0
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

ELEC 1124 Introduction to Electrical Blueprint Reading 2 1/1/0
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

ELEC 1130 Electrical Blueprints 3 2/1/0
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

ELEC 1140 Power-Limited Exam Prep 2 2/0/0
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 essential elements of the PLT examination, not all of which are found in the NEC.
Prerequisite: None
Corequisite: None

ELEC 1170 Predictive Maintenance Technology 2 1/1/0
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 critical 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

Course #	CourseTitle	CR	Lec/Lab/OJT

ELEC 1175 Best Maintenance Practices I 2 1/1/0
More than 70 percent of equipment failures in industry and manufacturing are self-induced by a company's own maintenance workers, policies or attitudes, resulting in downtime or lost production. This course covers the best maintenance practices as determined by top industrial and manufacturing companies. This course covers permanent repairs as related to specific tasks such as bearing replacement, chains, belts, coupling, lubrication, proper alignment and packing and seals.
Prerequisite: None
Corequisite: None

ELEC 2202 Heating/Cooling Controls 3 1/2/0
This course introduces basic electric heating, gas, oil, heat pump and cooling system installation and control. Topics include installing wiring for heating and air conditioning systems, replacing controls, measuring instruments and schematic interpretation.
Prerequisite: ELEC1107
Corequisite: None

ELEC 2205 Introduction to Commercial Wiring 3 1/2/0
This course examines the material and design aspects of commercial wiring. Topics include raceways, boxes, design requirements for conduit layouts, circuit overcurrent protection and lighting.
Prerequisite: ELEC1104 AND ELEC1122
Corequisite: None

ELEC 2206 Introduction to Motor Control Applications 3 2/1/0
This course provides an understanding of motor control symbols, line diagrams, contractors, starters and operating circuits. Lab procedures demonstrate components, circuitry and operation learned in theory. Measured data is recorded and interpreted.
Prerequisite: ELEC1108 AND ELEC1110
Corequisite: None

ELEC 2208 Programmable Logic Controllers 2 1/1/0
This course covers the theory, operation, installation, hardware, software and practical applications of programmable logic controllers (PLC). Basic PLC programming techniques for counters, timers and sequencers will be presented.
Prerequisite: None
Corequisite: None

ELEC 2211 Electronic Motor Control 3 2/1/0
This course provides application of basic theory and operation to electronic motor control including semi-conductors, rectifiers, regulators and amplifiers.
Prerequisite: ELEC1108
Corequisite: None

ELEC 2212 Commercial Wiring 3 1/2/0
This course covers materials and design aspects of commercial wiring, in particular lighting and fuse applications. Topics include lighting and lamp installation and selection, fuse selection, special outlets, load schedule, short circuit calculations and emergency illumination.
Prerequisite: ELEC2205
Corequisite: None

ELEC 2214 Industrial Wiring 2 1/1/0
This course covers the installation methods and materials used in industrial wiring. Topics include transformers, busways, motor installation, industrial metering, overcurrent system coordination, ground detection, grounding systems, surge protection, distribution, special systems and industrial hazardous locations, and the study of the National Electrical Code relating to these topics.
Prerequisite: ELEC1114
Corequisite: None

ELEC 2216 Motor Control Application 3 1/2/0
This course provides an advanced understanding of circuits controlling motors. Topics include jogging, braking, plugging, reduced voltage starting, phase loss protection, latching relays, time delay relays and safety requirements. Lab procedures demonstrate components, circuitry and operation learned in theory. Measured data is recorded and interpreted.
Prerequisite: ELEC2206
Corequisite: None

ELEC 2217 Building Automation I 2 0/2/0
This course introduces students to building automation systems. These systems are becoming critical required components used for green buildings, energy conservation and building safety systems. Topics covered in this course include electrical energy production, alternative energy sources and interconnection of renewable sources to existing power systems. This course also covers green utilization equipment and controls such as lighting, heating, ventilating and air conditioning, and plumbing.
Prerequisite: None
Corequisite: None

ELEC 2218 Building Automation II 2 0/2/0
This course is a continuation of Building Automation I. Topics covered include more critical building safety and security systems. These systems include fire systems and security and access control systems; voice, data and video systems; and automated building operations. Students will gain hands-on experience installing, programming and troubleshooting live systems.
Prerequisite: ELEC2217
Corequisite: None

ELEC 2220 Electrician Internship 3 0/0/3
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.
Prerequisite: None
Corequisite: None

ELEC 2222 Advanced Programmable Logic Controllers 3 1/2/0
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.
Prerequisite: ELEC2208
Corequisite: None

ELEC 2225 Transformers 2 0/2/0
This course covers the concepts of transformer operation. Single-phase and three-phase (polyphase) transformer operation and installation methods are explored. Included in the course are the following topics: transformer operation, transformation relationships, transformer losses, transformer types, transformer testing, series and parallel operation, connections, instrument transformers and maintenance procedures. National Electrical Code requirements for transformer installations are developed and utilized.
Prerequisite: ELEC1108
Corequisite: None

ELEC 2228 Electrical Troubleshooting 1 0/1/0
This course provides an application of principles of construction electricity to a variety of situations for the purpose of identifying and solving electrical problems. Emphasis is placed on electrical circuits pertaining to residential, commercial, industrial and motor control applications.
Prerequisite: 36 credits of ELEC courses
Corequisite: None

ELEC 2234 Hydraulics/Pneumatics 2 1/1/0
This course provides the knowledge of pneumatic and hydraulic controls necessary for the electrician employed in an industrial setting.
Prerequisite: None
Corequisite: None

ELEC 2236 Industrial Motor Maintenance 2 1/1/0
This course includes principles of industrial motor maintenance and experience with maintenance and troubleshooting situations common to industrial settings.
Prerequisite: ELEC1110
Corequisite: None

ELEC 2238 Low Voltage Wiring 2 1/1/0
This course provides students with an understanding of installation procedures and National Electrical Code (NEC) requirements for coax, telephone, fire alarm, security, fiber optic, cat 4, cat 5 and other low-voltage wiring systems.
Prerequisite: None
Corequisite: None

ELEC 2240 Code Update 1 1/0/0
This course provides the experienced electrician and advanced student with an overview of the National Electrical Code (NEC) and the State Electrical Act and can be used in preparing for the journeyman or masters electrical exam.
Prerequisite: 30 ELEC credits OR Approval of instructor.
Corequisite: None

ELEC 2244 National Electrical Code Changes 1 1/0/0
This course covers recent changes in the National Electrical Code and how they affect current wiring practices. The course is approved for continuing education hours.
Prerequisite: ELEC1104
Corequisite: None

ELEC 2246 Advanced Electronics 2 1/1/0
This course provides theory, operation and practical applications of various field-effect transistors, thyristors, photosensitive devices, sensing devices and wave chopping circuitry.
Prerequisite: ELEC2211
Corequisite: None

ELEC 2248 Code Applications 2 1/1/0
This course applies the principles of the National Electrical Code to job-specific situations.
Prerequisite: ELEC1104 AND ELEC1114
Corequisite: None

ELEC 2250 Special Topics/Projects 2 0/2/0
The student works with an advisor and instructor to develop a contract with specific goals in areas deemed applicable to the construction electricity industry and the student's career plan. This opportunity may be limited by conditions such as instructor/lab/material availability.
Prerequisite: None
Corequisite: None

ELL 0050 English Language Learner Foundations 4 3/1/0
This grammar-based course is for non-native learners of English and is designed to

prepare students to succeed in college-level fundamental courses. The course supports progress toward fluency in the English skill areas of speaking, listening, reading and writing through intensive study of grammatical structures. Content is chosen especially to provide sound models for needed basic written forms.
Prerequisite: None
Corequisite: None

ELL 0060 English Language Learner Reading 3 3/0/0
This reading 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.
Prerequisite: None
Corequisite: None

ELL 1060 English Language Learner Writing I 4 3/1/0
This writing course is for non-native learners of English and is designed to prepare students for ELL1080: ELL Writing II. Students will learn the short essay form for expository writing, emphasizing sentence and paragraph structures as well as editing for increased accuracy.
Prerequisite: None
Corequisite: None

ELL 1080 English Language Learner Writing II 3 3/0/0
This writing course is for non-native learners of English and is designed to prepare students for college-level writing tasks and/or courses. Students will learn multiple-paragraph essay forms with an emphasis on paraphrasing, summarizing, quoting and analyzing sources. Students will inventory patterns of error and create an individual plan for increasing accuracy.
Prerequisite: ELL1060 OR Placement into the course
Corequisite: None

ELL 1090 Editing for College Writing 2 2/0/0
This support course is for non-native speakers of English enrolled in ENGL1101: College Writing. Students will practice applying linguistic structures for integrating source material, identifying patterns of error and applying strategies for increasing sentence-level accuracy in their writing.
Prerequisite: successful completion of ELL1080, ENGL0097, or ENGL0096, or placement by assessment
Corequisite: ENGL1101

ELL 1175 English Language Learner Listening Comprehension and Speaking 3 3/0/0
This course for non-native learners of English continues the development of listening and speaking skills necessary for participating in college-level classroom discussion, incorporates oral presentation and fosters critical listening skills needed for taking notes and understanding lectures.
Prerequisite: None
Corequisite: None

ELWT 1102 Electrical Line Worker Theory I 4 2/2/0
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 current circuitry calculations and rigging skills including basic knots and splices pertaining to the electrical industry.
Prerequisite: None
Corequisite: None

ELWT 1104 Electrical Structure Installation 5 2/3/0
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.
Prerequisite: None
Corequisite: None

ELWT 1106 Climbing Electrical Structure 4 0/4/0
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.
Prerequisite: None
Corequisite: None

ELWT 1108 Construction of Overhead Structures 3 0/3/0
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.
Prerequisite: None
Corequisite: None

ELWT 1110 Line Worker Theory II 4 2/2/0
This course provides the study of the principles of alternating current high voltage distribution circuitry. Included in this course are mathematical computation of AC power, conductor application including practice at armor rodding, hand and pre-formed ties, overvoltage and overcurrent installations, and street lighting circuits.
Prerequisite: ELWT1102
Corequisite: None

ELWT 1112 Transformers 2 0/2/0
This course provides the student with the knowledge and skills necessary for mounting and connecting transformers to primary and secondary systems. The course will also cover paralleling of closed and open banks.
Prerequisite: ELWT1108
Corequisite: ELWT1110

ELWT 1114 Line Construction Reports 2 2/0/0
This course provides the student with an understanding of the design of line work construction drawings and equipment installation orders.
Prerequisite: ELWT1108
Corequisite: None

ELWT 1116 Pole Top and Bucket Rescue 1 0/1/0
This course provides the student with an understanding of procedures necessary to complete a rescue of a line worker disabled while on a pole or in an aerial device.
Prerequisite: ELWT1106
Corequisite: None

ELWT 1118 Field Construction I 3 0/3/0
This course covers the installation of single-phase high voltage systems under actual field conditions. The overhead construction component of the course includes structural assembly, including grounding requirements, guying, conductor installation including stringing and tying, single-phase transformer, capacitor and regulator installation. The second component of the course is underground installation, covering trencher operation, primary and secondary cable termination, services, pad mount transformers and sectionalizing cabinets, and street lighting.
Prerequisite: ELWT1106
Corequisite: None

ELWT 1120 Field Construction II 3 0/3/0
This course covers the installation of multi-phase high voltage systems under actual field conditions. The overhead section will cover structure assembly including grounding, structural guying, conductor installation including stringing and tying, multi-phase transformer installation, capacitor installation, regulator installation, and the use of protective cover-up material and hot sticks. The underground section will cover multiple cable installation, primary and secondary cable termination, three-phase pad mount transformer installation and multi-phase sectionalizing cabinet installation.
Prerequisite: None
Corequisite: None

ELWT 1122 Field Construction III 3 0/3/0
This course gives the student a basic understanding of overhead transmission structure construction and installation requirements for 69KV systems. Students will also participate in two industry hot line schools, one sponsored by the Minnesota Municipal Utilities Association and the other by the Minnesota Rural Electric Cooperatives.
Prerequisite: ELWT1120
Corequisite: None

ELWT 1130 Electrical Line Worker Internship 2 0/0/2
This course will concentrate on the student receiving apprentice line work skills under the supervision of an appropriate industry representative.
Prerequisite: Instructor approval
Corequisite: None

ELWT 1132 Electrical Line Worker Internship 3 0/0/3
In this course, the student will learn apprentice line work skills under the supervision of an appropriate industry representative.
Prerequisite: Instructor approval
Corequisite: None

EMST 1000 Introduction to Emergency Medical System 1 1/0/0
In this course, students explore the history and current trends of the emergency medical system (EMS). Student will learn the professional roles and responsibilities of the EMS team, implement primary injury prevention activities to reduce death, disability and health care costs, and examine ethical and legal issues affecting the EMS.
Prerequisite: None
Corequisite: None

EMST 1010 Emergency Pharmacology 2 1/1/0
In this course students will learn the basics of medication including safe administration, dosage calculation, drug actions and uses. Students will learn how to safely administer medications by mouth, injection and intravenous (IV) methods. Students also will learn how to start an IV.
Prerequisite: None
Corequisite: EMST1000

EMST 1020 Patient Assessment 2 1/1/0
In this course, students will learn techniques to obtain and document medical history and physical assessment from patients across the life span. Students will learn how to communicate assessment findings with other members of a medical team. Students will integrate therapeutic communication, physiological, psychological and sociological changes across the life span and developmental stages.
Prerequisite: None
Corequisite: EMST1000

EMST 1030 Emergency Cardiopulmonary Care 5 4/1/0
Students in this course integrate pathophysiological principles and assessment findings to formulate field impressions and treatment plans for patients with cardiovascular or

respiratory conditions. Students will use basic life support skills for airway management and learn advanced techniques to establish and maintain a patent airway.
Prerequisite: None
Corequisite: EMST1000 AND EMST1020

EMST 1040 Special Populations 2 1/1/0
Students in this course will explore labor, delivery, and postpartum and newborn care in the prehospital setting. Students will learn to care for patients who are at different developmental stages, from different cultural backgrounds and experiencing mental health issues, and also how to both safely care for and transport bariatric patients.
Prerequisite: None
Corequisite: None

EMST 1050 Paramedic Clinical I 1 0/0/1
In this course, students will provide quality and safe care to patients from diverse groups. Students will demonstrate therapeutic communication and maintain professionalism.
Prerequisite: EMST1000 AND EMST1010 AND EMST1020 AND EMST1030
Corequisite: None

EMST 1060 Emergency Medical System Operations 2 2/0/0
In this course the paramedic student will learn standards and guidelines ensuring safe and effective medical transport by ground and air. Students will learn incident management techniques; develop an awareness of safe operations while working crime scenes, emergencies and rescue scenarios; and learn how to evaluate hazardous material emergencies, call for appropriate resources and work in a cold zone.
Prerequisite: None
Corequisite: None

EMST 2000 Paramedic Medical I 2 2/0/0
This course is designed to integrate pathophysiological principles and assessment findings to formulate a field impression and implement field treatment plans for patients with neurological problems, endocrine problems, allergic and anaphylactic reactions, and gastro-enterological and urological problems.
Prerequisite: BIOL2262 AND BIOL2263 AND EMST1030
Corequisite: None

EMST 2010 Traumatic Emergencies 2 1/1/0
In this course the paramedic student will learn physics of motion to predict the likelihood of injury. Assessment findings will be used to formulate a field impression and implement a field treatment plan.
Prerequisite: BIOL2262 AND BIOL2263 AND EMST1030
Corequisite: None

EMST 2020 Paramedic Medical II 2 2/0/0
Students will learn to safely treat patients with environmental conditions, infectious and communicable diseases, and mental health or behavioral emergencies.
Prerequisite: None
Corequisite: EMST2000

EMST 2040 Paramedic Lab I 2 0/2/0
In this laboratory course, students will learn how to apply electrocardiogram (EKG) leads, interpret EKGs and administer medications.
Prerequisite: EMST1010
Corequisite: EMST2020

EMST 2050 Paramedic Lab II 2 0/2/0
Students in this laboratory course will participate as a team member and a team leader in the efficient care of patients with advanced needs who are experiencing medical and/or traumatic conditions. Students will learn to predict future pathology from patient and family histories.
Prerequisite: None
Corequisite: EMST2040

EMST 2201 Paramedic Clinical II 4 0/0/4
The paramedic student will continue the clinical experience utilizing advanced skills, modeling professional behavior and recognizing personal weaknesses in order to continue to promote self-improvement.
Prerequisite: None
Corequisite: EMST2280 AND EMST2270 AND EMST2211 AND EMST2261

EMST 2211 Advanced Cardiac Life Support 2 1/1/0
This course is designed for health care providers who direct or participate in the management of cardiopulmonary arrest or other cardiovascular emergencies. Students will enhance their skills in recognition and treatment of cardiopulmonary arrest, immediate post-cardiac arrest, acute arrhythmia, acute coronary syndrome (ACS) and stroke.
Prerequisite: None
Corequisite: None

EMST 2261 Pediatric Advanced Life Support 2 1/1/0
In this course, students will reinforce skills in the care of pediatric patients experiencing cardiopulmonary arrest including a systematic approach to pediatric assessment, basic life support, pediatric advanced life support (PALS) treatment algorithms and effective resuscitation team dynamics.
Prerequisite: None
Corequisite: None

EMST 2271 Prehospital Trauma Life Support 2 1/1/0
This course is designed to prepare the emergency medical services provider with an organized approach to providing care to a trauma patient. This course is designed to give the student the knowledge to obtain the best possible patient outcome in a traumatic emergency. This course uses the latest methods provided by the National Association of Emergency Medical Technologists in cooperation with the American College of Surgeons.
Prerequisite: None
Corequisite: None

EMST 2280 Advanced Medical Life Support 2 1/1/0
This advanced medical life support course provides students an in-depth study of caring for people experiencing medical emergencies.
Prerequisite: None
Corequisite: None

EMST 2292 Paramedic Capstone Experience 2--5
NoneStudents in this course will demonstrate entry-level competence as paramedics in supervised internship experiences.
Prerequisite: EMST2010 AND EMST2050
Corequisite: EMST2280 AND EMST2211 AND EMST2261 AND EMST2201 AND EMST2271

ENG 1101 Ethics and the Engineering Profession 3 3/0/0
This course covers ethical theories, professional responsibilities and social impacts as they relate to engineering teamwork skills, design and engineering careers.
Prerequisite: There are no prerequisites for this course.
Corequisite: None

ENGL 0096 Reading and Writing Strategies 6 6/0/0
This hybrid course integrates college-level reading and writing. Students will practice various reading strategies and develop proficiency in comprehending, summarizing, analyzing and interpreting college-level texts as well as practice strategies designed to strengthen their writing skills, including grammar, usage and mechanics. Students also will practice all stages of the writing process, from invention and drafting to revising and editing, as they create well-structured sentences, paragraphs, essays and other types of writings.
Prerequisite: Placement by assessment.
Corequisite: None

ENGL 0097 Express English Strategies 3 3/0/0
This course is designed to prepare students for college-level reading and writing tasks across the disciplines. Students will practice strategies in order to develop reading proficiency and writing skills. They also will engage in all stages of the writing process, from invention and drafting to revising and editing, as they respond to texts and specific writing situations.
Prerequisite: Course placement is determined by assessment
Corequisite: None

ENGL 0098 Accelerated English 3 3/0/0
This course must be taken in conjunction with a linked section of College Writing (ENGL1101) taught by the same instructor. It is designed to prepare students for college-level reading and writing tasks across the disciplines. Students will practice strategies in order to develop reading proficiency and writing skills. They also will engage in all stages of the writing process, from invention and drafting to revising and editing, as they respond to texts and specific writing situations.
Prerequisite: Course placement is determined by assessment
Corequisite: None

ENGL 1101 College Writing 3 3/0/0
Meets MnTC Goal Area 1. This is an introductory writing course designed to prepare students for later college and career writing. The course focuses on developing fluency through a process approach, with particular emphasis on revision. Students will consider purpose and audience, read and discuss writing and further develop their own writing processes through successive revisions to produce polished drafts. Course work will include an introduction to argumentative writing, writing from academic sources and a short research project.
Prerequisite: Completion of ELL1080, ENGL0096, or ENGL0097 with a grade of C or higher OR placement into college-level English.
Corequisite: None

ENGL 1205 Writing About Literature 3 3/0/0
Meets MnTC Goal Area 1. This course builds on the foundations of College Writing and provides students with additional opportunities to develop fluency in their writing through a process approach. Students will read critically from a variety of literary genres, explore meaning through academic research and respond through discussion and writing.
Prerequisite: ENGL1101
Corequisite: None

ENGL 1210 Writing About Current Issues 3 3/0/0
Meets MnTC Goal Area 1. This course builds on the foundations of College Writing and provides students with additional opportunities to develop and refine their writing through a process approach. Students will explore current issues by critically reading a variety of texts, conducting academic research and responding through discussion and writing.
Prerequisite: ENGL1101
Corequisite: None

ENGL 1215 Professional and Technical Writing 3 3/0/0
Meets MnTC Goal Area 1. This course provides instruction in writing and designing professional and technical documents, including print and non-print correspondence, descriptions, instructions, reports and proposals, along with promotional material.

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

ENGL 2200 Introduction to Creative Writing 3 3/0/0
This course 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 sub-categories. 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. Course delivery will include a traditional class format as well as workshop settings, where students' work will be read, analyzed and critiqued by others in the class. The course may include the following: presenting and submitting manuscripts, analyzing the motivation for writers, editing and criticism, techniques for reading work aloud and analyzing masterpiece models. Evaluation of course competencies may be based on writing journals, portfolios, presentations, large and small group discussions, collaborative tasks, manuscripts (completed or works in progress) and/or public readings of student works.
Prerequisite: ENGL1101
Corequisite: None

ENGL 2221 Creative Writing: Poetry 3 3/0/0
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 poetry and poetic modes of writing. Emphasis will be on writing original work and on learning 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: ENGL1101
Corequisite: None

ENGL 2222 Creative Writing: Fiction 3 3/0/0
Meets MnTC Goal Area 6F. This creative writing course focuses on the writing of short fiction. It is 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 learning 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/or travelogues. Students will present and submit manuscripts, discuss each other's work in a workshop format and will be expected to edit and critique both their own and fellow students' works.
Prerequisite: ENGL1101
Corequisite: None

ENGL 2223 Creative Writing: Personal Narrative 3 3/0/0
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 and critiquing original work as well as reading and modeling exemplary memoir writing. This course counts as a fine arts course as it emphasizes the creation of fine arts as opposed to the formal critical analysis of them.
Prerequisite: ENGL1101
Corequisite: None

ENGL 2228 A Well Examined Life: Reading and Writing Memoir 3 3/0/0
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: ENGL1101
Corequisite: None

ENGL 2230 Environmental Literature 3 3/0/0
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
Corequisite: None

ENGL 2234 Introduction to Literature: Short Stories 3 3/0/0
Meets MnTC Goal Areas 2, 6 and 7. This literature course will increase students' understanding of individual and group differences through a close study of short stories. Issues of race, gender, class, tradition and value will be the focus of the course as illuminated by the literature. The course will also cover the basic elements of short stories. Stories studied may include selections from various ethnic groups, genders or classes.
Prerequisite: ENGL0075 OR ENGL0050 OR ENGL1101
Corequisite: None

ENGL 2235 Introduction to Literature: Drama 3 3/0/0
Meets MnTC Goal Areas 2, 6 and 8. This literature course will introduce students to the growing interdependence of the people 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: ENGL1101
Corequisite: None

ENGL 2236 Introduction to Literature: Novel 3 3/0/0
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 both the U.S. and abroad. 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: ENGL1101
Corequisite: None

ENGL 2237 Introduction to Literature: Short Prose 3 3/0/0
Meets MnTC Goal Areas 2, 6 and 9. This literature course will focus on the ethical dimensions of political, social and personal life as conveyed in short prose. The basic elements and concepts of short prose will be studied.
Prerequisite: ENGL1101
Corequisite: None

ENGL 2238 Literature, Illness and the Human Condition 3 3/0/0
This course meets MnTC Goal Areas 6 and 9. Students will read fiction and nonfiction literary texts as a means for understanding issues related to health, illness and the human condition. Through discussions, writings and projects, students will analyze the readings in order to learn about the literary genres, explore the range of responses to the issues (including their own) and identify and reflect about ways people exercise their roles as responsible members of their communities and citizens of the world.
Prerequisite: ENGL1101
Corequisite: None

ENGL 2239 Nature Writers 3 3/0/0
This course meets MnTC Goal Areas 2, 6 and 10. This course will focus on texts written by great nature writers. While special emphasis will be placed on those works that stress conservation and ecology, others will enable students to see the human struggle with the environment as protagonist. Material may also include travel writing, as well as the more recent directions toward urban nature and nontraditional/multicultural perspectives. Texts may include nonfiction, novels, poetry and plays. Students will gain experience in reading critically and writing logical, sound papers that deal with environmental issues and text analysis.
Prerequisite: ENGL1101
Corequisite: None

ENGL 2302 American Ethnic Literature 3 3/0/0
Meets MnTC Goal Areas 6 and 7. This multi-genre literature course is a study of significant writers and selected works presenting diverse groups based on race, ethnicity, gender, class, culture, etc. The origins, contributions and changing dynamics of specific groups in the United States will be studied through reading, analysis and discussion.
Prerequisite: ENGL1101
Corequisite: None

ENGL 2304 Introduction to Literature, Native American Focus 3 3/0/0
Meets MnTC Goal Area 2 and 6. This introductory literature 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: ENGL1101
Corequisite: None

ENGL 2310 Introduction to Mythology 3 3/0/0
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: ENGL1101
Corequisite: None

ENGL 2314 Introduction to Shakespeare 3 3/0/0
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: ENGL1101
Corequisite: None

ENGL 2321 Women in Literature 3 3/0/0
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 genres, as well as themes, issues and theories specific to literature written by women.
Prerequisite: ENGL1101
Corequisite: None

ENGL 2322 Banned Literature 3 3/0/0
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 3/0/0
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 3/0/0
This course meets Goal Areas 2, 6 and 10. This course is an in-depth study of travel literature. This course will primarily focus on modern travel literature, 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 3/0/0
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 2372 Children's Literature 3 3/0/0
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 2374 The Poetics of Rock Lyrics 3 3/0/0
Meets MnTC Goal Areas 2 and 6. This course focuses on the study of poetry and poetic 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 1/0/0
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 3 1/2/0
The 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 3 1/2/0
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 3/0/0
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 3/0/0
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 3/0/0
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 None
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 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

ENGT 1100 Introduction to Building Information Modeling 3 3/0/0
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: CADD1000 OR CONM1101 OR Instructor Approval
Corequisite: None

ENGT 1118 Construction and Manufacturing Math 3 3/0/0
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 3 1/2/0
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 3 1/2/0
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 4 4/0/0
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 1/0/0
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 2/0/0
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 1/1/0
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 3/0/0
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 to evaluate an entrepreneurial career for themselves. In doing so, it provides aspiring entrepreneurs with a framework for selecting, funding and starting their own new ventures.
Prerequisite: None
Corequisite: None

ENTR 1400 Opportunity Analysis 3 2/1/0
In this course, students will assess their individual or organization's skills, talents, education, and work experiences for potential business opportunities. They will also examine their external environment to identify trends and needs in the marketplace for potential business opportunities. Students will then screen potential business ideas by practicing primary and secondary research methods.
Prerequisite: None
Corequisite: None

ENTR 1800 Business Internship 3 0/0/3
This course is designed to provide the student with a purposeful occupational experience in a business environment related to his or her program of study. 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: advisor consent
Corequisite: None

ENTR 2200 Entrepreneurial Field Studies 3 0/0/3
This course exposes students to business owners and practicing entrepreneurs currently managing ongoing entrepreneurial enterprises. The purpose of the course is to develop mentor relationships with successful practicing business owners and to gain first-hand experience about the knowledge, skills and abilities necessary to be a successful entrepreneur. Students will submit reports throughout the semester addressing questions that integrate entrepreneurship and other business coursework with their work experience.
Prerequisite: None
Corequisite: None

ENTR 2220 Business Ethics/Professionalism 3 3/0/0
This course examines issues related to ethics in business and their impact upon society, the economy and the environment. Students will increase their awareness in making decisions based on ethical judgments. Students will examine the roles, responsibilities and conflicts of business management in the context of organizational ethics. Students will analyze case studies of workplace behavior and define appropriate professional conduct in various workplace scenarios including dress, language and other emerging trends.
Prerequisite: None
Corequisite: None

ENTR 2222 Business Plan Development 3 2/1/0
This course covers the steps in creating a business plan. Areas that will be addressed and developed are industry analysis, strategic positioning, marketing and sales strategy, operations, management and organization, and financials.
Prerequisite: None
Corequisite: None

EQSC 1001 Introduction to Equine Science 1 1/0/0
This course introduces the student to the basics of equine breeds, types of horses, including characteristics and uses, and husbandry practices. It will also cover aspects of the equine industry such as career paths and necessary job skills.
Prerequisite: None
Corequisite: None

EQSC 1050 Equine Anatomy 3 2/1/0
This course provides an overview of equine anatomy, physiology and disease management. This course allows students to learn basic anatomy and physiology using a systems approach specific to the equine. The student will apply this knowledge to the subjects relevant to equine health management such as equine diseases, disease prevention (vaccination and husbandry), lameness, performance and parasite control.
Prerequisite: None
Corequisite: None

EQSC 1060 Equine Reproduction and Nutrition 3 3/0/0
This course introduces the student to the management of the breeding stallion, reproducing mare and newborn foal. It will discuss the anatomy and endocrinology of the reproductive system, the mare estrus cycle, spermatogenesis and cooled and frozen semen insemination techniques. Fundamentals of equine nutrition, feed selection, digestive anatomy and ration evaluation will also be covered.
Prerequisite: None
Corequisite: None

EQSC 1130 Stable Operations I 1 0/1/0
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.
Prerequisite: None
Corequisite: None

EQSC 1131 Stable Operations II 2 1/1/0
Students will have hands-on experience working in an operational equine facility such as 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 3 1/2/0
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 1150 Fundamentals of Riding Instruction 2 1/1/0
The student will be provided training in how to give clear, practical and comprehensible instruction. Varied instruction styles will be covered, as well as developing lesson plans, executing lesson plans, problem solving and instruction management.
Prerequisite: None
Corequisite: None

EQSC 1160 English Equitation 3 1/2/0
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 1 0/1/0
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 2 2/0/0
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 2 1/1/0
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 1 1/0/0
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 3 3/0/0
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 3 3/0/0
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 6 0/0/6
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

world. These sites are all working farms, ranches, clinics, breeding facilities, stables, etc. All disciplines (English, western, ranch, breeding, veterinary, riding, training, showing, etc.) are represented in order to meet a student's specific area of interest. Students will be required to meet written goals and objectives and undergo evaluations from their host supervisors. Student academic progress will also be monitored via the M State online learning platform.
Prerequisite: EQSC1001 AND EQSC1050 AND EQSC1060 AND EQSC1130 AND EQSC1131 AND EQSC1140 AND EQSC1150 AND EQSC1160 AND EQSC1170
Corequisite: None

ESTH 1801 Advanced Skin Treatments 1 1/0/0
In this course students learn about advanced skin care techniques including lymph drainage, chemical peels, microdermabrasion and spa body treatments.
Prerequisite: None
Corequisite: None

FIRE 1100 Introduction to Fire Service 2 2/0/0
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.
Prerequisite: None
Corequisite: None

FIRE 1106 Firefighter I and II 3 3/0/0
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.
Prerequisite: None
Corequisite: None

FIRE 1108 Firefighter I and II Skills 4 0/4/0
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 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.
Prerequisite: None
Corequisite: None

FIRE 1130 Technical Rescue 3 1/2/0
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.
Prerequisite: FIRE1100 AND FIRE1106 AND FIRE1108
Corequisite: None

FIRE 1140 Fire Inspection and Code Enforcement 3 1/2/0
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 Examiner.
Prerequisite: FIRE1100 AND FIRE1106 AND FIRE1108
Corequisite: None

FIRE 1150 HazMat Operational 3 2/1/0
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 Operation 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.
Prerequisite: None
Corequisite: None

FIRE 1152 Building Construction 3 2/1/0
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.
Prerequisite: FIRE1100 AND FIRE1106 AND FIRE1108
Corequisite: None

FIRE 1180 Building Construction for Fire Protection 3 3/0/0
This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations and operating at emergencies.
Prerequisite: None
Corequisite: None

FIRE 2020 Fire and Emergency Services Administration 3 3/0/0
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 2 2/0/0
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 3 3/0/0
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 3 3/0/0
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 2 2/0/0
This course provides the principles of fire ground control through utilization of personnel, equipment and extinguishing agents.
Prerequisite: None
Corequisite: None

FIRE 2080 Fire Service Leadership and Management 3 3/0/0
This course will explore the skills necessary to function as a supervisor within a tight-knit, family-like setting. Topics will include motivating employees; group dynamics; managing change; organizational behavior; organizational culture; performance evaluations; leadership theories; group cohesiveness; generational considerations; and personal leadership styles.
Prerequisite: None
Corequisite: None

FNCS 1110 Introduction to Financial Services 3 3/0/0
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

FNCS 1111 Introduction to Financial Services 3 3/0/0
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 industry concern about customer service, sales, marketing and competition.
Prerequisite: None
Corequisite: None

FNCS 1114 Consumer Lending 3 2/1/0
This course covers the fundamental procedures used by consumer lenders in making lending decisions. The student will perform loan interviewing, credit investigation, loan pricing and the preparation of documents for consumer loans. Students will develop notes, security agreements, contracts and other supporting credit documents. Topics will include consumer loan servicing, credit products, marketing, loan documentation, loan portfolio management, lien searches and the functions of the Uniform Commercial Code.
Prerequisite: None
Corequisite: None

FNCS 1119 Personal Finance Products/Customer Service 3 2/1/0
This course covers the sale of new checking, savings and certificate of deposit accounts and other financial products. The student will prepare account applications as well as necessary forms and documents for the sale of all types of financial products typically offered in financial service institutions. The student will also role play simulated sales of financial products. Topics include checking accounts, savings accounts, certificates of deposits, loan payments and all other financial products and services.
Prerequisite: None
Corequisite: None

FNCS 2221 Real Estate Lending 3 2/1/0
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,

collateral releases and other supporting credit documentation. Topics include mortgage types, FHA/VA/conventional financing, second mortgages, loan documentation, title insurance, foreclosure and appraisals.
Prerequisite: None
Corequisite: None

FYE 1000 Student Success Seminar 1 1/0/0
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.
Prerequisite: Instructor approval required.
Corequisite: None

FYE 1101 First Year Experience 3 3/0/0
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 4 2/2/0
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 2 0/2/0
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 3 1/2/0
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 5 1/4/0
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 4 2/2/0
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 3 1/2/0
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 1 1/0/0
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 1 0/1/0
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 5 1/4/0
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 3 1/2/0
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 4 2/2/0
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 3 2/1/0
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 3 2/1/0
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 3 2/1/0
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 3 2/1/0
As the second of three layout courses in a series, students will expand upon their basic design knowledge by learning advanced methods of style, typography, 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: GDTC1113
Corequisite: None

GDTC 1124 Interactive Design I 3 2/1/0
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 3 2/1/0
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 3 2/1/0
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 3 2/1/0
This course covers fundamental functions of Adobe Illustrator to create basic illustrations and layout.
Prerequisite: None
Corequisite: None

GDTC 1144 Electronic Drawing II 3 2/1/0
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 3 3/0/0
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 3 2/1/0
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

Course #	CourseTitle	CR	Lec/Lab/OJT

GDTC 2205 Adobe Photoshop II 3 2/1/0
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 3 2/1/0
As the third of three layout courses in a series, this course focuses on brand and identity development. Each student develops his or her own fictitious company that will include a 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, marketing techniques, rationale and presentation.
Prerequisite: GDTC1113 AND GDTC1115
Corequisite: None

GDTC 2214 Integrated Graphic Design 3 2/1/0
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 3 2/1/0
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 2 1/1/0
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 2242 Electronic Publishing 3 2/1/0
Students will learn in-depth technical skills necessary for page layout design. A variety of design projects will be assigned that will teach students to effectively incorporate type and imagery in single- and multiple-page documents. These projects will involve simple to complex tasks that will reinforce students' basic design skills.
Prerequisite: GDTC1113
Corequisite: None

GDTC 2244 Advanced Electronic Imaging 3 2/1/0
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 3 2/1/0
This course covers the use of Adobe Illustrator to create and manipulate electronic illustrations, logos and artwork.
Prerequisite: GDTC1134
Corequisite: None

GDTC 2246 Advanced Photography and Imaging 4 2/2/0
In this course students will learn how to photograph in Raw File Format (RAW). Students will demonstrate setting components for Raw File Format and develop a clear understanding 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). Students will identify CMYK profiles, develop a high degree of competency in manipulating photographs using Photoshop, and understand the importance of computer monitor calibration for color quality. Additionally, students will demonstrate advanced photography framing techniques and focus on how various lenses, aperture settings and film speeds work together.
Prerequisite: GDTC1126
Corequisite: None

GDTC 2258 Graphic Design Professional Practices 3 2/1/0
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 3 0/0/3
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

GDTC 2278 Digital Preflight 3 2/1/0
Students will create and analyze electronic files to identify and resolve potential conflicts that may arise in different production processes. A variety of design projects will be produced using Adobe applications, with an emphasis on file construction and production preparation.
Prerequisite: GDTC2242
Corequisite: None

GEOG 1110 World Geography 3 3/0/0
Meets MnTC Goal Areas 5 and 8. Students will gain an understanding and appreciation of the spatial relationship of the physical and human elements of our world with an emphasis on the interdependence of nations and peoples. Geography describes the earth's environments and gives character to places through words, maps and graphics, and this course will explore these elements and their contributions to the diversity of world geographics. Students will become aware of how the world and the earth's people interact in local regions and in patterns around the globe.
Prerequisite: None
Corequisite: None

GEOG 1160 Global Physical Geography 3 3/0/0
Meets MnTC Goal Areas 8 and 10. This course emphasizes the interactions of biological, geographical and climactic systems in the development of the patterns of regional environments on the surface of the earth and their interactions with human activities.
Prerequisite: None
Corequisite: None

GLST 1510 Global Studies: Natural Science 3 3/0/0
Meets MnTC Goal Areas 3 and 8. This travel-abroad course combines a classroom component with a travel experience which includes scheduled academic activities in international locations as determined by the instructor. Students will study and experience unique ecosystems and biodiversity, as well as cultural and societal differences of the travel abroad location. This course includes field or lab-like activities, including a field notebook and ecosystem analysis.
Prerequisite: Permission of the instructor is required.
Corequisite: None

GOLF 1100 Rules of Golf 1 1/0/0
This course reviews the rules of golf in detail. Students develop a clear understanding of how to navigate the rule book by studying The Rules of Golf and The Decisions on the Rules of Golf. Emphasis is placed on practical hands-on application of the rules and decisions on the golf course. Proper course set-up and marking a golf course for an official USGA event are also discussed. The course prepares students to take the USGA Rules Exam.
Prerequisite: None
Corequisite: None

GOLF 1101 Golf Club Repair 1 0/1/0
This course introduces students to the art of golf club design and repair. Focus is on the technology and techniques involved, the correct processes by which clubs are properly designed and repaired, and the equipment currently available to custom design and repair in today's industry. Custom design and repair lab setup and establishing a successful design and repair business are also discussed.
Prerequisite: None
Corequisite: None

GOLF 1102 Tournament Operations 1 1/0/0
The course provides an overview of golf tournament operations. Students establish, facilitate, design and operate a golf tournament. Emphasis is on the checklist required to operate a successful golf tournament. Calligraphy, tournament types and tournament marketing are also discussed.
Prerequisite: None
Corequisite: None

GOLF 1200 Introduction to Golf Fundamentals and Methods 3 2/1/0
This course discusses the fundamentals of golf necessary to play at the beginning recreational level. It includes discussion of rules, etiquette, equipment and terminology. The course will be a combination of classroom lecture and golf course experience.
Prerequisite: None
Corequisite: None

GOLF 2100 Pro Shop Operations and Management 3 3/0/0
This course introduces students to the role of management in golf facility operations. Emphasis is on the administration of course procedures, tee times and retail space. Pro shop operations and the impact on customer and player relations are analyzed. Player performance analysis and instructional methodology are also discussed.
Prerequisite: None
Corequisite: None

GOLF 2200 Turf Management 3 3/0/0
This course introduces students to the management of golf course turfgrass and landscaping. Focus is on the ecology of turf, maintenance operations, irrigation and the equipment necessary for course care. Pest and weed control management, chemical handling and the environmental impact of golf are also discussed.
Prerequisite: None
Corequisite: None

GOLF 2201 Soils and Fertilizers 3 2/1/0
This course is a study of soils and plant nutrition as related to golf course maintenance. Emphasis is on physical and chemical properties, water, organic matter and life of golf course soils. Process and methods of supplying nutrients to plants will be discussed.
Prerequisite: None
Corequisite: None

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 also will 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
Corequisite: None

GOLF 2402 Golf Internship 1--3 Non
eThis course provides students with the opportunity to apply knowledge and skills in an operational golf environment. Students will perform activities in an employer-supervised industry setting that are consistent with program outcomes. Depending on the employee assignment, this course may emphasize the duties golf professionals face in industry regarding communication, decision-making, professional and ethical behavior, organizational policies, time and resource management, and customer service. This course may be repeated for credit.
Prerequisite: None
Corequisite: None

GOLF 2500 Fundamentals of Golf Instruction 3 3/0/0
This course provides the student with the materials and means to teach the fundamentals of the golf swing. Emphasis is on the skills it takes to be an instructor of golf lessons. These skills include but are not limited to communication, patience, coordination, knowledge of the golf swing, troubleshooting an individual's swing, and the ability to instruct both individuals and groups.
Prerequisite: None
Corequisite: None

HCCC 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: Students interested in taking the nursing assistant certification exam are required by the MN Department of Health to take HCCC 1001 Nursing Assistant Skill Set concurrently.

HCCC 1001 Nursing Assistant Skill Set 2 0/2/0
This laboratory and clinical course is to be taken concurrently with the HCCC1000 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 HCCC1000 Healthcare Core Curriculum course.
Prerequisite: Clear Minnesota Department of Health criminal background check AND Demonstration of required immunizations
Corequisite: HCCC1000

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 that 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 examines 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 1780s to 1877. Consideration is given to the Constitution of 1787, 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 covered 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 the significance of geography and natural resources, relations between Native American and 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 3 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: HITM1150
Corequisite: None

HITM 1153 Introduction to Electronic Health Records 1 1/0/0
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

Course #	CourseTitle	CR	Lec/Lab/OJT

HITM 1155 Medicolegal Aspects 3 2/1/0
This course focuses on the application of legal principles, policies, regulations and standards for the control and use of health information. Emphasis is on the proper release of patient information and legal procedures involved in court disclosure of health record information. An electronic health record system is utilized for tracking the request and disclosure of protected patient information.
Prerequisite: HITM1150
Corequisite: None

HITM 1159 Professional Practice Experience Functions 2 0/0/2
This course provides the student with practical applications of theories in the field of health information technology. Under the supervision of a qualified health information professional, the student gains professional practice experience in basic health record functions.
Prerequisite: HITM1155
Corequisite: None

HITM 1160 Health Information Systems and Statistics 3 2/1/0
This course is a study of the basic health information systems as they move from the paper record to the hybrid version and the electronic health record implementation. Primary and secondary records will be defined. Other areas to be covered are documentation requirements, retention, record destruction, computing and interpreting health care statistics, and the appropriate display of statistical data.
Prerequisite: None
Corequisite: None

HITM 2202 Computer Applications in Healthcare 3 2/1/0
This course develops the health information technology student's knowledge of computer theory and application in the areas of system collection, storage and retrieval.
Prerequisite: None
Corequisite: None

HITM 2204 Fundamentals of Electronic Health Records 3 1/2/0
This course focuses on electronic health records and other computer systems used in health care. The course also covers software applications, system selection and implementation, data quality, storage and retrieval, security and privacy, and how these systems and issues affect and are affected by the health information management profession. An electronic health record system is used in this course.
Prerequisite: CPTR1104 AND HITM1150
Corequisite: None

HITM 2211 Basic Pharmacology for Coders 2 2/0/0
This course introduces the coding student to basic pharmacology concepts and drug categories as related to current coding guidelines. Emphasis is placed on commonly used drugs and their effects on body systems. Drug reference utilization is included.
Prerequisite: HLTH1116
Corequisite: None

HITM 2214 Introduction to International Classification of Diseases (ICD) Coding 3 2/1/0
This course covers an in-depth study of the International Classification of Diseases (ICD). The edition taught is based on the industry's currently required classification system. Sample exercises and medical records are used to develop skill and accuracy in assigning diagnostic and procedure codes based on the health care setting. Coding guidelines appropriate to the health care setting will be applied.
Prerequisite: BIOL2260 AND BIOL2261 AND HLTH1116 AND HLTH2208
Corequisite: None

HITM 2216 Introduction to Procedure Coding 3 1/2/0
This course is an introduction to procedural coding guidelines using Current Procedural Terminology (CPT), the Center for Medicare and Medicaid Services Healthcare Common Procedure Coding System (HCPCS) classification systems, and the International Classification of Diseases-Procedure Coding System (ICD-PCS) current classification systems. Students will practice assigning procedure codes to clinical information found in a health record while maintaining ethical coding standards by adhering to current regulations and guidelines in procedural code assignment.
Prerequisite: HLTH1116 AND BIOL2260
Corequisite: None

HITM 2218 Intermediate Procedure Coding 3 1/2/0
This course is a continuation of coding guidelines using the current classification system. Students will practice assigning procedure 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 procedure code assignment.
Prerequisite: HITM2216
Corequisite: None

HITM 2230 Medical Science for Health Information Professionals 3 3/0/0
This course provides students with an understanding of fundamental concepts of pathological conditions and therapeutics associated with multiple medical conditions. A working knowledge of the nature and cause of disease processes including the etiology, signs, symptoms and diagnostic evaluation are covered. Appropriate treatment modalities are covered for each body system, including pharmacological, preventative, palliative, therapeutic and surgical. This allows health information professionals to apply diagnosis and treatment knowledge to code assignment according to current guidelines.
Prerequisite: HLTH1116 AND BIOL2260
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

HITM 2236 Advanced International Classification of Diseases (ICD) Coding 2 1/1/0
This course is a continuation of the in-depth study of the International Classification of Diseases (ICD) coding and reimbursement in the health care delivery system. Coursework in ICD-10 is included.
Prerequisite: Permission of instructor
Corequisite: None

HITM 2238 Advanced Coding CPT 2 1/1/0
This course is a continuation of the in-depth study of the Physician's Current Procedural Terminology (CPT) coding system.
Prerequisite: HITM2216
Corequisite: None

HITM 2250 Supervisory Leadership in Health 3 3/0/0
This course provides practical instruction in supervisory and management principles from a health information management (HIM) perspective. The principles introduced will provide a foundation and path for sound management practice and decision making. The course covers theories of management, supervisory and management functions in HIM, change management, legal aspects, policies, procedures, accounting methodologies and the support of diversity in the workplace. Staff recruitment, retention, training and development in HIM are also covered.
Prerequisite: HITM1150
Corequisite: None

HITM 2252 Quality Management & Statistics 3 2/1/0
This course covers the components of quality improvement systems, including quality assessment, utilization review and risk management. This course is also a study of collecting, computing, analyzing, interpreting and presenting numerical data relating to health care services.
Prerequisite: HITM1152
Corequisite: None

HITM 2253 Quality Management Studies 3 2/1/0
This course covers the components of quality improvement systems such as quality assessment, performance improvement, utilization management, risk management and credentialing. Also included is preparation for licensing and accreditation surveys.
Prerequisite: HITM1150
Corequisite: None

HITM 2262 Reimbursement Systems 2 2/0/0
This course is an introduction to the current reimbursement systems that are used in inpatient and outpatient settings in the health care industry.
Prerequisite: Permission of the instructor.
Corequisite: None

HITM 2263 Reimbursement Systems 3 2/1/0
This course covers the current reimbursement systems that are used in inpatient and outpatient settings in the health care industry. The revenue cycle management process will be covered, including the importance of clinical documentation improvement, chargemaster processes and procedures, compliance strategies, and fraud surveillance and reporting.
Prerequisite: HITM1150
Corequisite: None

HITM 2270 Professional Practice Experience Management 1 0/0/1
This course provides the student with practical application of classroom theories and coursework. Under the supervision of a qualified health record professional , the student gains professional practice experience in supervisory and management functions.
Prerequisite: Permission of the instructor.
Corequisite: None

HITM 2272 Professional Practice Experience Coding 2 0/0/2
This course provides the student with practical application of classroom theories and coursework. Under the supervision of a qualified supervisor, the student gains professional practice experience in coding and reimbursement.
Prerequisite: HITM2282 AND HITM2216
Corequisite: None

HITM 2275 Health Record Documentation 1 1/0/0
This course allows students to review and apply the applicable accreditation standards for health record documentation. Students also will review and apply payer requirements and professional practice standards. The policies of uniform content and format will be applied.
Prerequisite: HITM1160
Corequisite: None

HItM 2280 Registered Health Information Technology Exam Review 1 1/0/0
This course will assist students in preparing to write the American Health Information Management Association's Registered Health Information Technology exam. Students will systematically review the content of the exam according to the American Health Information Management Association's curriculum comprised of the defined domain, subdomains and tasks . Discussions will assist students in locating published study aids and practice exams.
Prerequisite: Permission of the instructor
Corequisite: None

HITM 2282 Introduction to Diagnosis Coding 3 1/2/0
This course focuses on the International Classification of Diseases (ICD) coding system. Emphasis will be placed on the correct process of utilizing the alphabetic index and

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

HITM 2283 Intermediate Diagnosis Coding 3 1/2/0
This course is a continuation of coding guidelines using the current International Classification of 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: HITM2282
Corequisite: None

HITM 2284 Advanced International Classification of Diseases,Tenth Edition 2 1/1/0
This course is a continuation of the in-depth study of the International Classification of Diseases, 10th Edition.
Prerequisite: HITM2282
Corequisite: None

HITM 2290 Health Care Data Management and Analysis 3 1/2/0
This course provides an outline 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: HITM2204
Corequisite: None

HLTH 1100 Introduction to Nutrition 2 2/0/0
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

HLTH 1110 Introduction to Anatomy and Physiology 3 3/0/0
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

HLTH 1111 Personal and Community Health 3 3/0/0
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 importance 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

HLTH 1112 Introduction to Home Health 1 1/0/0
This course builds on the nursing assistant course to introduce the concepts of home care 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

HLTH 1115 Introduction to Nursing in Long Term Care 3 1/2/0
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

HLTH 1116 Medical Terminology 3 3/0/0
This course covers prefixes, suffixes and root words used to compose medical terms. The student learns to spell, pronounce, define, analyze and formulate terminology related to body structure, disease, diagnosis and treatment. Medical abbreviations are also included.
Prerequisite: None
Corequisite: None

HLTH 1121 Nursing Assistant-Home Health Aide 4 2/2/0
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.
Prerequisite: None
Corequisite: None

HLTH 1122 CPR-First Aid 1 0.5/0.5/0
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.
Prerequisite: None
Corequisite: None

HLTH 1130 Transcultural Health Concepts 1 1/0/0
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 will illustrate 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.
Prerequisite: None
Corequisite: None

HLTH 1201 Introduction to Mental Health Behavioral Aide 4 4/0/0
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 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 developing redirection and de-escalation skills. The aide will perform these duties under the supervision of a mental health practitioner.
Prerequisite: None
Corequisite: None

HLTH 2100 Wellness for Athletic Performance 3 3/0/0
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 illicit).
Prerequisite: None
Corequisite: None

HLTH 2208 Pathophysiology 3 3/0/0
This course presents information related to pathophysiology of various body systems. The nature, cause, diagnosis and treatment of common disease conditions will be emphasized.
Prerequisite: HLTH1110 OR BIOL2230
Corequisite: None

HLTH 2212 Social Seminar Drug Education 3 3/0/0
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.
Prerequisite: None
Corequisite: None

HLTH 2213 Emergency Responder 3 2.5/0.5/0
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.
Prerequisite: None
Corequisite: None

HLTH 2215 EMT Basic 6 4/2/0
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.
Prerequisite: None
Corequisite: None

HONS 1101 Introduction to Honors 1 1/0/0
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, mise en 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

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.
Prerequisite: None
Corequisite: None

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. 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. 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 2301 Heroes, Moral and Cultural 3 3/0/0
Meets MnTC Goal Areas 2 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 sheet 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 hooking up and troubleshooting 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 2202 Air Handling 2 1/1/0
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 2212 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 move 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 add to the student's electrical knowledge regarding circuits and schematics.
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. Industries 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 2292 OSHA 30-Hour General Industry 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 jobsite-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 2297 OSHA 30-Hour Construction Safety 2 2/0/0
This course is designed for construction workers under the 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 information 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 the 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

IMMA 1110 Introduction to Power and Mechancial 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
In this course students will learn how to read basic engineered 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 industry 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-voice 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 workplace experience by observation of an interpreter at 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 World Wide 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

documentation, trade journals, white papers and other useful IT resources.
Prerequisite: None
Corequisite: None

ITSS 2100 Supporting End-User Applications 3 2/1/0
This course emphasizes the knowledge, skills and abilities necessary to improve the productivity of the computer user. Students will learn about providing support for the user's computer, including the operating system and the software applications installed on the computer.
Prerequisite: ITSS1100
Corequisite: None

ITSS 2200 Professional Standards and Practices in Information Technologies 3 2/1/0
This course is designed to explore ethical issues, procedural matters and policy concerns that impact how information technology solutions are implemented and managed in the business world. This course explores the principles that information technology professionals can apply when considering the best options for dealing with such issues as privacy, intellectual property, data use and the ethical and legal obligations of IT specialists. Students will learn how good business practices and strong ethical decision-making can have a positive impact on an organization and society in general.
Prerequisite: None
Corequisite: None

LEAD 1000 The Emerging Leader 2 1/0/1
The emerging leader course allows students to understand leadership concepts, strategies and skills in a workplace setting. The student will practice workplace skills and self-reflection in preparation for a leadership position in a workplace or a community. The student will be assigned a business mentor and will spend 30 hours in a business or non-profit environment and 15 hours in the classroom. This course is designed to enhance the student's ability to function as an effective community leader.
Prerequisite: None
Corequisite: None

MATH 0055 Foundational Mathematics 2 2/0/0
This course presents basic mathematical operations. The course concepts cover operations on whole numbers, integers, fractions and decimals, as well as the applications of percents, ratios, proportions, measurements and basic geometry.
Prerequisite: None
Corequisite: None

MATH 0085 Elementary Algebra I 2 2/0/0
This course provides both a foundation for further study of general and technical mathematics and preparation for applying mathematics in daily life and other college coursework. Topics include problem solving and critical thinking using properties of numbers and algebra. Through the study of mathematics, students will work on developing self-assessment and goal-setting skills, utilizing resources and gaining an understanding of the level of commitment necessary to succeed in an academic or real-world setting.
Prerequisite: Math 0055 Foundational Mathematics or appropriate placement test score.
Corequisite: None

MATH 0095 Elementary Algebra II 2 2/0/0
This course is the study of algebraic concepts including identifying linear and nonlinear functions, solving equations, manipulating and graphing linear equations and inequalities in two variables, utilizing rules for exponents, performing operations on polynomials, factoring polynomials and solving equations using factoring.
Prerequisite: Math 0085 or appropriate placement test score
Corequisite: None

MATH 1000 Technical Mathematics 3 3/0/0
This course presents basic mathematical topics as they are applied in a technical program. The course includes a review of basic mathematical operations and continues with the development of algebraic and trigonometric skills in a technical setting. Most concepts will be applied through course-specific problems. This course is not an MnTC Goal Area 4 mathematics course, nor does it prepare students for taking an MnTC Goal Area 4 mathematics course.
Prerequisite: MATH0055 OR placement by assessment
Corequisite: None

MATH 1020 Intermediate Algebra 3 3/0/0
This course includes equations of lines, systems of equations, rational expressions and equations, functions, radical expressions and equations, complex numbers, absolute value equations and inequalities, and solving quadratic equations using factoring, completing the square and the quadratic formula.
Prerequisite: Math 0095 with a grade of C or higher OR placement by assessment
Corequisite: None

MATH 1100 World of Math 3 3/0/0
Meets MnTC Goal Areas 2 and 4. This course will introduce you to mathematical approaches to question asking, understanding, problem solving and presentation. Practice in these areas may include problems involving sequences, methods of counting, probability, logic, statistics, general problem solving and other topics.
Prerequisite: MATH1020
Corequisite: None

MATH 1102 Finite Math 3 3/0/0
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 4 4/0/0
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 4 4/0/0
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 3 3/0/0
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 5 5/0/0
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 or by placement score
Corequisite: None

MATH 1122 Applied Calculus and Linear Algebra 3 3/0/0
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 application 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 5 5/0/0
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 5 5/0/0
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 3 3/0/0
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 4 4/0/0
Meets MnTC Goal Areas 2 and 4. Topics include data summary, frequency distributions, plots, graphs, measures of central tendency, variation, probabilities, probability distributions and confidence intervals. Hypothesis testing of means, proportions and variances will be conducted using the z-test, t-test, chisquare-test, f-test and ANOVA. Optional topics may include nonparametric statistics, sampling and simulation.
Prerequisite: MATH1114 AND or by placement exam OR MATH1118
Corequisite: None

MATH 2200 Principles of Arithmetic 3 3/0/0
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

Course #	CourseTitle	CR	Lec/Lab/OJT

MATH 2231 Calculus III 4 4/0/0
Meets MnTC Goal Areas 2 and 4. The course content includes a study of vectors in the plane and space, differentiation and integration of vector-valued functions, and partial differentiation, multiple integrals, including line and surface, in rectangular, polar, cylindrical, spherical and other systems, and a study of Stokes' Theorem, Green's Theorem, and the Divergence Theorem.
Prerequisite: MATH1135
Corequisite: None

MATH 2257 Linear Algebra 3 3/0/0
Meets MnTC Goal Areas 2 and 4. The course focuses on systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues and eigenvectors.
Prerequisite: MATH1134
Corequisite: None

MATH 2259 Differential Equations 4 4/0/0
This course includes first and second order differential equations with applications in physics, electrical engineering and chemistry. It also includes Laplace transforms, matrices, series solutions and systems of differential equations.
Prerequisite: MATH2231
Corequisite: None

MCDD 1104 Mechanical Engineering Drawing I 4 1/3/0
The objective of this course is to develop the student's knowledge and use of machine drafting, lettering, line identity and application, orthographic projection, dimensioning practices, and section and auxiliary drawings.
Prerequisite: None
Corequisite: None

MCDD 1106 Mechanical Engineering Drawing II 4 0/4/0
The objective of this course is to develop the student's use and knowledge of pictorial drawings, sheet metal, pattern layout and welding drawing. Mechanical fasteners will be identified.
Prerequisite: MCDD1104
Corequisite: None

MCDD 1114 Manufacturing Processes 2 2/0/0
The objective of this course is to develop the student's understanding of processes for casting, molding, forming, separating and assembling a variety of manufacturing-related materials.
Prerequisite: None
Corequisite: None

MCDD 1124 Mechanical Drafting Applications I 3 1/2/0
The objective of this course is for students to develop a set of working drawings of an existing machine project. A genealogy chart, final and sub-assembly drawings, detail drawings, parts lists and part numbering system will be completed.
Prerequisite: CADD1000 AND MCDD1104
Corequisite: None

MCDD 1210 Drafting Practices 1 1/0/0
The objective of this course is to develop the student's knowledge of engineering communications, attitudes and finances.
Prerequisite: None
Corequisite: None

MCDD 2112 Geometric Dimensioning and Tolerancing 2 2/0/0
The objective of this course is to develop the student's understanding and application of a self-defined set of symbols, rules, definitions and conventions used to describe the size, form, orientation and location of part features.
Prerequisite: CADD1114 AND MCDD1106
Corequisite: None

MCDD 2122 Geometric Dimensioning and Tolerancing 3 2/1/0
The objective of this course is to develop the student's understanding and application of a self-defined set of symbols, rules, definitions and conventions used to describe the size, form, orientation and location of part features.
Prerequisite: CADD1100 AND MCDD1106
Corequisite: None

MCDD 2200 Advanced Modeling with Solidworks 3 2/1/0
This course covers advanced part modeling, assembly modeling, sheet metal and presentation files in the latest version of the Solidworks drawing software package.
Prerequisite: CADD1114 AND MCDD1106
Corequisite: None

MCDD 2204 Mechanical Engineering Drawing III 4 1/3/0
The objective of this course is to explore advanced applications of various industry drawing methods. Students will be introduced to and will construct drawings related to multiple drafting and engineering disciplines.
Prerequisite: MCDD1106 AND CADD1000
Corequisite: None

MCDD 2206 Mechanical Engineering Drawing IV 2 1/1/0
This course introduces the student to multiple specialized computer programs to create working drawings for manufacturing and construction.
Prerequisite: CADD1102
Corequisite: None

MCDD 2210 Advanced Modeling with Inventor 3 2/1/0
This course covers advanced part modeling, assembly modeling, sheet metal and presentation files in the latest version of the Inventor drawing software package.
Prerequisite: CADD1114 AND MCDD1106
Corequisite: None

MCDD 2220 Mechanical Engineering Drawing IV 3 2/1/0
This course introduces the student to multiple specialized computer programs to create working drawings for manufacturing and construction.
Prerequisite: CADD1000
Corequisite: None

MCDD 2230 3D Printing and Prototyping 2 1/1/0
This course covers the basic concepts of rapid prototyping for manufacturing utilizing three-dimensional printers and scanning equipment.
Prerequisite: CADD1114
Corequisite: None

MCDD 2246 Tool Design 3 1/2/0
The objective of this course is to develop an understand of jigs, fixtures, dies and their function in mass production, starting at the basic levels of component pieces through to design and implementation.
Prerequisite: CADD1114 AND MCDD1106
Corequisite: None

MCDD 2248 CNC Application 3 1/2/0
The objective of this course is to develop the student's knowledge of computer numerical control components and basic programming codes.
Prerequisite: CADD1114 AND MCDD1106
Corequisite: None

MCDD 2252 Mechanical Drafting Applications II 4 1/3/0
The objective of this course is to develop the student's knowledge of the processes involved in design development and scheduling. Gearing, shafts, chains, and belts and bearings, along with part, sub-assembly and assembly representations are applied to the student's capstone project.
Prerequisite: MCDD2210 AND MCDD2200
Corequisite: None

MCDD 2254 Computer Numerical Control 2 1/1/0
This course develops the student's knowledge of computer numerical control components, machines, and basic programming codes and functions.
Prerequisite: CADD1000 OR CADD1200 OR CADD1210
Corequisite: None

MCDD 2260 Mechanical Drafting Internship 3 0/0/3
The objective of this course is to develop and apply the student's drafting skills in his or her desired career field. Projects and discussions are coordinated to relate to the student's employment situation in an approved drafting occupation.
Prerequisite: CADD1114 AND MCDD1106
Corequisite: None

MCOM 1122 Introduction to Mass Communication 3 3/0/0
Meets MnTC Goal Areas 5 and 9. This course provides an introductory overview and history of the rapidly growing world of mass communication, with an emphasis on the United States. There will be specific analysis of the media industry including newspapers, radio, television, film, books, magazines, advertising, public relations and new media technology. Topics will include public relations, the role of government, values and ethics, and media effects.
Prerequisite: Assessment into ENGL 1101
Corequisite: None

MCOM 1142 Popular Culture and Social Media 3 3/0/0
Meets MnTC Goal Area 7. This course explores various mediums including books, magazines, newspapers, radio, film, television and Internet and the implications of each on society. The ever-changing social mediums will be explored, along with the impact they have on communication. Topics may include social networking sites, implications of advertising and the evolution of reality television.
Prerequisite: None
Corequisite: ENGL1101

MCS 2230 Multicultural America 3 3/0/0
Meets MnTC Goal Area 7. This course provides an introduction to multicultural perspectives on American education. Given that the United States is becoming more culturally diverse and operates within an increasingly globalized world, citizens need to be equipped to understand the diverse cultures with which they work and interact. This course exposes students to the experiences and challenges of African Americans, American Indians, Chicano/Latinos and Asian Americans in the U.S. educational system from historical and contemporary perspectives.
Prerequisite: None
Corequisite: None

MCS 2231 Multicultural America: Service Learning 1 1/0/0
This course provides an introduction to multicultural perspectives on American education via a hands-on experience working and interacting with diverse cultures in an educational setting. The nature of the service learning necessitates that students may meet outside of regular class hours (20-25 hours) and may need their own transportation to service learning sites.
Prerequisite: None
Corequisite: MCS2230

MEDA 1150 Pathophysiology, Pharmacology and Nutrition 4 4/0/0
This course covers pathophysiology, phamacology 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.
Prerequisite: None
Corequisite: None

MEDA 1240 Clinical Procedures I 4 2/2/0
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.
Prerequisite: American Heart Association Health Care Provider CPR
Corequisite: None

MEDA 1260 Clinical Procedures II 4 2/2/0
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).
Prerequisite: MEDA1150
Corequisite: None

MEDA 1600 Medical Assisting Externship 5 1/0/4
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.
Prerequisite: MEDA1260
Corequisite: None

METC 1112 Manufacturing Processes 4 2/2/0
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.
Prerequisite: None
Corequisite: None

METC 1152 Safety and Accident Prevent 3 3/0/0
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.
Prerequisite: None
Corequisite: None

METC 2208 Basic Electricity and Electronics 3 2/1/0
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.
Prerequisite: None
Corequisite: None

MIS 1100 Business Computers 3 2/1/0
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.
Prerequisite: None
Corequisite: None

MKTG 1050 Direct Selling 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MKTG 1106 Professional Selling 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MKTG 1110 Customer Service 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MKTG 1116 Advertising and Promotion 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MKTG 1120 Supervisory Leadership 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MKTG 1128 Business Insights 1 0/1/0
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.
Prerequisite: None
Corequisite: None

MKTG 1130 Leadership Ethics 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MKTG 1138 Leadership Development I 1 0/1/0
This course encourages the personal and professional growth of the student. Emphasis is placed on the development of skills in decision making, problem solving, communications, professionalism and leadership.
Prerequisite: None
Corequisite: None

MKTG 1200 Introduction to Social Media 3 3/0/0
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.
Prerequisite: None
Corequisite: CPTR1104

MKTG 1210 InDesign 3 3/0/0
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, posters and catalogs. Students will learn how to create and modify pdf files for electronic distribution of publications.
Prerequisite: CPTR1104
Corequisite: None

MKTG 1280 Search Engine Optimization 3 3/0/0
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.
Prerequisite: INTD1108 AND CPTR1104
Corequisite: INTD1108 AND CPTR1104

MKTG 2204 Advanced Professional Selling 3 2/1/0
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.
Prerequisite: MKTG1106
Corequisite: None

MKTG 2206 Sales Management 3 2/1/0
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.
Prerequisite: MKTG1106
Corequisite: None

MKTG 2214 E-Marketing 3 3/0/0
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

opportunities and challenges faced in the electronic environment. Students will apply the components of the traditional 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 those 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 3 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 3 2/1/0
This is a capstone course 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 2234 Computer Marketing Applications 3 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 with 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 3 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, and understanding and influencing multiple decision makers.
Prerequisite: MKTG1106 AND MKTG2204
Corequisite: None

MKTG 2290 Management, Marketing and Sales Internship 3 0/0/3
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 3 0/0/3
This class 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 1/1/0
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. The 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 BUS2204 AND MKTG1100 OR ACCT1012 AND BUS2206 AND MKTG2200 OR ACCT1012 AND BUS2204 AND BUS2206 OR ACCT2211 AND BUS2204 AND MKTG1100 OR ACCT2211 AND BUS2206 AND MKTG2200 OR ACCT2211 AND BUS2204 AND BUS2206
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 accessing 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 new, complex business situations.
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

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.
Prerequisite: MLT1115 OR MLT1113 AND MLT1114
Corequisite: None

MLT 1225 Biological Fluids 2 1/1/0
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 OR MLT1114 AND MLT1113 AND Admission to the MLT program
Corequisite: None

MLT 2130 Diagnostic Chemistry 4 3/1/0
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 2217 Clinical Hematology 3 0/3/0
This course is a clinical experience 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 2218 Clinical Urinalysis 1 0/1/0
This course provides a clinical experience in performing routine and special urinalysis and other body fluid analysis under the supervision of laboratory personnel.
Prerequisite: BIOL1125 OR MLT2315
Corequisite: None

MLT 2219 Clinical Chemistry and Special Chemistry 3 0/3/0
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 2220 Clinical Blood Bank 2 0/0/2
This course provides further instruction and study of the techniques of blood group serology and compatibility testing and the selection of the proper blood component for the patient. Adverse reaction to blood products and reaction investigations are discussed. Discussions of donor screening, blood processing and component preparations are in accordance with the American Association of Blood Bank Standards. This course is taken as part of the clinical rotation through blood bank.
Prerequisite: MLT1123
Corequisite: None

MLT 2221 Clinical Microbiology 3 0/3/0
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 BIOL2268 AND BIOL2267
Corequisite: None

MLT 2222 Clinical Chemistry 2 0/2/0
This course is a clinical experience in the chemistry department of an affiliate hospital under the supervision of qualified laboratory personnel. Students will 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 2 0/0/2
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 2 0/0/2
This course furthers 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

MLT 2230 Clinical Applications 1 1/0/0
This course is intended to broaden the learner's knowledge and skills of 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 2 1/1/0
This course is intended for Medical Laboratory Technician students and other health professionals. Topics covered include principles of antigens, antibodies and their combination 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: MLT1215 AND MLT1115 OR ZOO1122 AND MLT1113 AND MLT1114
Corequisite: None

MLT 2325 Diagnostic Chemistry 3 2/1/0
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 MLT1215 OR MLT1113 AND MLT1114 OR CHEM1101 OR CHEM1111
Corequisite: None

MLT 2345 Clinical Applications 2 1/1/0
This course is intended to broaden the learner's knowledge and skills of analysis and procedures performed in a health care facility laboratory through hands-on simulation or clinical experience at a health care facility. Students also will develop skills to enter the workforce.
Prerequisite: MLT2315 OR BIOL1125
Corequisite: None

MRNT 1104 Drive System Theory 3 3/0/0
This course covers the operational theory of the stern-mounted vertical drives and outboard gear cases. Gear ratios, upper housings, lower housings, inputs and outputs will be investigated. Common drive systems from outboard and stem drive are covered in this course. Identification, theory of disassembly, measurement, shimming and assembly procedures will be outlined in this course. Failure analysis is emphasized during this course.
Prerequisite: None
Corequisite: None

MRNT 1105 Introduction to Marine 2 2/0/0
This course covers information on laws governing the use of public waterways as administered by both state and federal agencies as well as the National Marine Manufacturer's Association regulations. Students will learn the history of marine systems along with the identification of each type. The course also covers the manufacturers' service and parts literature used in the operation of marine businesses, emphasizing the service department.
Prerequisite: None
Corequisite: None

MRNT 1106 Drive System Service 3 0/3/0
This course teaches the repair procedures for the common stern-mounted vertical drive systems built by MerCruiser and outboards built by Mercury Marine and OMC. Complete drive disassembly, measurement, analysis, shimming and rebuilding will be performed. Failure analysis of components will be covered in detail.
Prerequisite: None
Corequisite: None

MRNT 1107 Drive Systems I 3 2/1/0
This course covers the operational theory and service of the (clutch-style) Mercury and MerCruiser drives units. Gear ratios, drive shaft housing and gear cases will be investigated. Complete drive disassembly, measurement, analysis, shimming and rebuilding will be performed.
Prerequisite: None
Corequisite: None

MRNT 1114 Introduction to Boat Rigging 2 1/1/0
This course provides training in the procedures necessary to prepare boats for showroom and customer delivery. Motor mounting, controls, instrumentation and accessories are discussed. Students will perform rigging and adjustment procedures on powerboats.
Prerequisite: None
Corequisite: None

MRNT 1120 Marine Starting and Charging Systems 3 2/1/0
This course teaches the service procedures necessary for off-road products (2-cycle/4-cycle) 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.
Prerequisite: None
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

MRNT 2001 Marine Internship 1 0/0/1
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 may be practiced at the internship site. Additional skills from completed courses also may be included in the training plan.
Prerequisite: TRNS1015 AND TRNS1193
Corequisite: None

MRNT 2002 Marine Internship 2 0/0/2
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 be included in the training plan.
Prerequisite: TRNS1015 AND TRNS1193
Corequisite: None

MRNT 2107 Drive Systems II 3 2/1/0
This course covers the operational theory and service of the Johnson, Evinrude and Yamaha outboard drive units. Complete drive disassembly, measurement, analysis, shimming and rebuilding will be performed.
Prerequisite: None
Corequisite: None

MRNT 2205 Marine Advanced Fuel Systems 3 1/2/0
This course covers the many types of fuel systems used on current two-stroke and four-stroke higher-end marine products. Most training will be on outboards above 115 horsepower and sterndrives above 135 horsepower. The main focus of this course is on larger carbureted and fuel-injected systems along with fuel distribution and associated parts of those systems.
Prerequisite: None
Corequisite: None

MRNT 2206 Electronic Fuel Injection (EFI) Systems 3 1/2/0
This course teaches the theory of operation and service of the electronic fuel injection (EFI) and direct fuel injection (DFI) systems used on sterndrive and outboard applications. Engine predelivery inspection and service will be outlined along with seasonal service, engine preparation and inspection. Students will focus on diagnostic procedures with and without the use of laptops and scan tools.
Prerequisite: MRnt2001
Corequisite: None

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: MRNT2218
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 will 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 sternmounted 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, shimming 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, shimming 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, knowledge and concepts 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 coursework 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: MRNT2207
Corequisite: None

MUSC 1112 Beginning Class Guitar 1 1/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1113 Beginning Class Voice 1 1/0/0
Meets MnTC Goal Area 6F. This course provides class instruction in the healthy use of the voice in singing and speaking and practical application of vocal techniques. 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, speech therapy and elementary education majors. A maximum of two semesters may be taken for a credit.
Prerequisite: None
Corequisite: None

MUSC 1114 Beginning Class Piano 2 2/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1115 America's Musical Heritage 3 3/0/0
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, musical experiences, field research and cultural contexts of American music styles, including jazz, country, R&B, hip hop, rap, salsa, reggae and urban folk styles.
Prerequisite: None
Corequisite: None

MUSC 1116 World Music 3 3/0/0
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 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.
Prerequisite: None
Corequisite: None

MUSC 1117 Beginning Class Guitar 2 2/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1118 Rock and Pop Music 3 3/0/0
Meets MnTC Goal Area 6. This survey of rock and pop music for all students provides a comprehensive history of pop music in the United States from its origins leading up to Elvis Presley to the Beatles to the current sounds of today. Emphasis is placed on the music itself through analysis and critique and covers all styles of rock and pop music such as pop, R&B, country western, soul, Motown, folk, folk rock, heavy metal, rap and hip hop and beyond.
Prerequisite: None
Corequisite: None

MUSC 1120 Introduction to Music Technology 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1121 Basic Theory and Musicianship I 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1122 Basic Theory and Musicianship II 3 3/0/0
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. Involves analysis and composition. It must be taken concurrently with MUSC 1124.
Prerequisite: MUSC1121
Corequisite: None

MUSC 1123 Sight Singing and Ear Training I 1 1/0/0
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 ust be taken concurrently with MUSC 1121.
Prerequisite: None
Corequisite: None

MUSC 1124 Sight Singing and Ear Training II 1 1/0/0
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 with MUSC 1122.
Prerequisite: None
Corequisite: None

MUSC 1131 Civic Orchestra 1 1/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1135 Voice Ensemble 1 1/0/0
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, MCC Fine Arts Festival and occasional area tours. May be repeated for credit.
Prerequisite: MUSC1141
Corequisite: None

MUSC 1141 Concert Choir 1 1/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1145 Chamber Chorale 1 1/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1150 History of Jazz 3 3/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1151 Individual Voice Lessons 1 1/0/0
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.
Prerequisite: None
Corequisite: None

MUSC 1160 Music Business: Creating and Promoting Music 3 3/0/0
Meets MnTC Goal Area 6. Students study and prepare music in various contemporary styles. The group(s) will perform each semester. There will be special emphasis on aspects of music business and performance, including audio demo production, promotion, management and recording contracts, in addition to songwriting, improvisation and performing.
Prerequisite: None
Corequisite: None

MUSC 1162 Jazz Ensemble 1 1/0/0
Meets MnTC Goal Area 6F. The Jazz Ensemble meets on a weekly basis, studies and prepares music in the various styles of jazz and performs one concert each semester. 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.
Prerequisite: None
Corequisite: None

MUSC 1164 Concert Band 1 1/0/0
Meets MnTC Goal Area 6F. 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 campus life venues, festivals and occasional area tours. Small ensemble performances will also be included in this experience. May be repeated for credit.
Prerequisite: None
Corequisite: None

MUSC 1168 Pep Band 1 1/0/0
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. This ensemble will participate in sporting events, campus life venues and other events. May be repeated for credit.
Prerequisite: None
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

MUSC 1181 Private Instrumental Lessons 1 1/0/0
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 1 1/0/0
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 1 1/0/0
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 1 1/0/0
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. Must be taken concurrently with MUSC 2231.
Prerequisite: MUSC1124
Corequisite: None

MUSC 2224 Sight Singing and Ear Training IV 1 1/0/0
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 2232.
Prerequisite: MUSC2223
Corequisite: None

MUSC 2231 Advanced Theory and Musicianship III 3 3/0/0
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 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: MUSC1122 AND MUSC1124
Corequisite: None

MUSC 2232 Advanced Theory and Musicianship IV 3 3/0/0
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 2 2/0/0
Meets MnTC Goal Area 6F. Individual voice lessons of one hour per week are open to advanced students with instructor's consent. The course is required of voice performance or voice pedagogy majors and includes required performances. Students interested in this course should contact the music department so that instruction may be arranged. There is an additional fee, and it may be repeated for credit.
Prerequisite: None
Corequisite: None

MUSC 2281 Private Instrumental Lessons 2 2/0/0
Meets MnTC Goal Areas 2 and 6. Individual woodwind, brass, percussion and guitar 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. May be repeated for credit.
Prerequisite: None
Corequisite: None

MUSC 2285 Advanced Music Composition 2 2/0/0
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 2 2/0/0
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

Course #	CourseTitle	CR	Lec/Lab/OJT

NURS 1400 Introduction to Professional Nursing 2 2/0/0
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.
Prerequisite: 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.
Corequisite: None

NURS 1406 Nursing Fundamentals I 3 2/1/0
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.
Prerequisite: 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.
Corequisite: None

NURS 1415 Nursing Clinical I 2 0/2/0
This course promotes the application of fundamental skills while providing holistic nursing care to a diverse group of patients. The course incorporates the concepts of quality and safe patient care, professional behavior, therapeutic communication and self-evaluation.
Prerequisite: BIOL2267 AND BIOL2268 AND ENGL1101 AND NURS1400 AND NURS1406 AND BIOL2260 AND BIOL2261 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.
Corequisite: None

NURS 1416 Nursing Fundamentals II 4 2/2/0
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.
Prerequisite: BIOL2260 AND BIOL2261 AND NURS1400 AND NURS1406 AND BIOL2267 AND BIOL2268 AND ENGL1101 AND PSYC2222
Corequisite: None

NURS 1426 Reproductive Health 2 2/0/0
This course introduces antepartal, intrapartal, postpartal and neonatal nursing 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. Nursing care is examined to maintain and promote wellness for pediatric patients, considering variations based on normal growth and development.
Prerequisite: PSYC2222 AND NURS1400 AND NURS1406 AND BIOl2260 AND BIOL2261 AND BIOL2267 AND BIOL2268
Corequisite: None

NURS 2120 Professional Nursing Pharmacology 2 2/0/0
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.
Prerequisite: BIOL2263 AND NURS1406 AND BIOL2262 OR
LPN AND NURS2410
Corequisite: None

NURS 2410 Role Transition 2 2/0/0
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.
Prerequisite: 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.
Corequisite: None

NURS 2426 Reproductive Disorders 2 2/0/0
This course analyzes nursing care of antepartal, intrapartal, postpartal and neonatal conditions for the mother and infant with the focus on complications, illnesses or

abnormalities. This course is designed to plan nursing care for patients as they adapt to abnormal reproductive conditions including infectious diseases, infertility, problems with sexual functioning and other dysfunctions of both the male and female reproductive tracts.
Prerequisite: NURS1415 AND NURS1416 AND NURS1426 AND BIOL2262 AND BIOL2263 AND CHEM1100 OR LPN AND NURS2410
Corequisite: None

NURS 2437 Nursing Clinical II 4 0/4/0
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 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.
Prerequisite: NURS1415 AND NURS1416 AND NURS1426 AND CHEM1100 AND BIOL2262 AND BIOL2263 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. OR
LPN AND NURS2410 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

NURS 2438 Restorative Nursing I 4 4/0/0
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.
Prerequisite: NURS1415 AND NURS1416 AND NURS1426 AND BIOL2262 AND BIOL2263 AND CHEM1100 OR
LPN AND NURS2410
Corequisite: None

NURS 2447 Nursing Clinical III 4 0/4/0
This clinical course provides the professional nursing student with opportunities to manage care for diverse patient populations including care planning delegation, supervision, prioritization and continuity of care. Concepts of 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 interwoven into patient care.
Prerequisite: NURS2437 AND NURS2426 AND NURS2438 AND NURS2455 AND BIOL2202 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

NURS 2448 Restorative Nursing II 3 3/0/0
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.
Prerequisite: NURS2438 AND NURS2437 AND NURS2426 AND NURS2455 AND BIOL2202
Corequisite: None

NURS 2455 Advanced Intravenous Therapy 1 0/1/0
This lab course focuses on the skills and management of intravenous therapy by the professional nurse. Emphasis is placed on safety, nursing judgment, evidence-based practice, quality improvement and patient-centered care.
Prerequisite: NURS1415 AND NURS1416 AND NURS1426 AND BIOL2262 AND BIOL2263 AND CHEM1100 OR LPN AND NURS2410
Corequisite: None

NURS 2464 Nursing Leadership 1 1/0/0
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.
Prerequisite: NURS2437
Corequisite: None

NURS 2466 Mental Health Nursing 2 2/0/0
This course focuses on the concepts and theories of mental health, mental illness and psycho-pharmacology. Emphasis is placed on relationship-centered care, teamwork, quality and safety for diverse patient populations with psychiatric disorders.
Prerequisite: NURS2437
Corequisite: None

OPT 1100 Introduction to Fiber Optics 3 2/1/0
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.
Prerequisite: None
Corequisite: None

PARA 1101 Introduction to Paralegal 3 3/0/0
This course will introduce the basic knowledge and skills required of paralegals. Students will learn the basics of the American legal system along with skills such as researching legal issues, interviewing clients and witnesses, and drafting motions and pleadings. By the end of this course, students will have a clear understanding of what a paralegal does, the skills needed to be a successful paralegal and what it will take to begin a career as a paralegal.
Prerequisite: None
Corequisite: None

PARA 1102 Legal Research and Writing I 3 3/0/0
This course is a general introduction to recorded sources of law. It will examine where and how law can be found. The course will include discussion of the sources of law and practical writing exercises.
Prerequisite: Assess into college level English
Corequisite: ENGL1101 AND PARA1101

PARA 1104 Civil Law for Paralegals 3 3/0/0
This course prepares the paralegal for working with civil litigation and its associated processes. Included in the study are rules for civil procedure, court and non-court processes, applicable appellate procedures, mediation, arbitration and the role of the paralegal as it relates to civil law.
Prerequisite: None
Corequisite: None

PARA 1105 Criminal Law for Paralegals 3 3/0/0
This course prepares the paralegal for working with criminal defense or criminal prosecution. Included in the study is the organization of the criminal justice system, the nature of crimes, constitutional issues, applicable appellate procedures and the role of the paralegal as it relates to criminal law.
Prerequisite: None
Corequisite: None

PARA 1106 Wills, Trusts & Probate 3 3/0/0
This course includes a study of the procedures, documents and other techniques used in the planning for transfer of property after death and the administration of estates.
Prerequisite: None
Corequisite: None

PARA 1110 Torts for Paralegal 3 3/0/0
This course includes the study of the procedures, documents and techniques used in the practice of civil litigation, personal injury and family law. Topics for civil litigation include case intake, discovery, trial preparation, trial practice and post-judgment relief. Topics for family law include marriage, separation, divorce, annulment, adoption and custody.
Prerequisite: None
Corequisite: None

PARA 1112 Legal Ethics for the Paralegal 3 3/0/0
This course covers the attorney-client privilege as it relates to paralegals, unauthorized practice of law, regulation of paralegals, ethical codes and rules.
Prerequisite: None
Corequisite: None

PARA 2202 Legal Research and Writing II 3 3/0/0
This course is a continuation of Research and Writing I. Students will develop skills in identifying, analyzing and researching legal issues. Writing exercises will be more complex, including preparation of legal memoranda.
Prerequisite: PARA1102
Corequisite: None

PARA 2204 Real Property 3 3/0/0
This course includes the law dealing with interest in, ownership of and title to real estate. Emphasis will be placed on legal descriptions, recording systems, procedures and documents for real property transfer and zoning of real property.
Prerequisite: None
Corequisite: None

PARA 2210 Advanced Paralegal Practices 3 3/0/0
This course provides in-depth study of law using statute and case research. Students will examine legal issues in different areas of law and participate in discussion of these topics. Topics will range from law office structure and finances to procedural law and interviewing techniques. Instructor may include legal topics that are hot at the time of course offering.
Prerequisite: None
Corequisite: None

PARA 2212 Family Law 3 3/0/0
This course will explore and research family law concepts of marriage, divorce, annulment, child custody, property settlements and adoption.
Prerequisite: None
Corequisite: None

PARA 2216 Paralegal Internship 3 0/0/3
The paralegal internship provides students with the opportunity to apply the concepts and principles they have learned in a practical professional work environment under the supervision of a lawyer. Students complete an internship in which they perform the duties of a paralegal.
Prerequisite: PARA1102 AND ENGL1101
Corequisite: PARA2202

Course #	CourseTitle	CR	Lec/Lab/OJT

PDEV 1100 College Success Seminar 2 2/0/0
This course is designed to help first-year M State students successfully 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 3 3/0/0
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 is also designed to develop student awareness of how to live 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 1 0/1/0
This course covers such 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 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 1112 Job Search Skills 1 1/0/0
This course is designed to develop the application, resume writing, interviewing and job maintenance skills needed to conduct an effective job search.
Prerequisite: None
Corequisite: None

PDEV 1113 Career Life Planning 2 2/0/0
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 2 1/1/0
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 1 0/1/0
The purpose of this 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 1 0/1/0
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 muscular strength, muscular endurance, tone or size. This class may be repeated once for credit.
Prerequisite: None
Corequisite: None

PE 1190 Varsity Football 1 0/1/0
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 1 0/1/0
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 1 0/1/0
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 1 0/1/0
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 1 0/1/0
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 in this course must be approved by the head coach.
Corequisite: None

PE 1199 Varsity Softball 1 0/1/0
This course is for students who want to compete in varsity softball at the collegiate level. The course presents students with numerous 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 3 3/0/0
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 3 3/0/0
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 1 1/0/0
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 1 1/0/0
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 1 1/0/0
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 1 0/1/0
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: PE1141
Corequisite: None

PE 2190 Varsity Football II 1 0/1/0
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 enhanced 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. This course will provide the student athletes with an enhanced experience that comes with being a second-year participant. The student athletes 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 enhanced 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 enhanced 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 enhanced 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 lessons 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 concepts in 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

PE 2999 Athletic Leadership 1 0/1/0
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 seeking help at an early stage of personal or academic struggle. Students also will be required to participate in a community-based service learning activity designed by the instructor to positively enhance and market the Spartan Athletics image and brand.
Prerequisite: This course requires the approval of the instructor prior to enrollment.
Corequisite: None

PHIL 1130 Critical Thinking 3 3/0/0
Meets MnTC Goal Area 2. This course focuses on studying the structure of argument, the detection 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 linguistic definition plays in constructing strong arguments.
Prerequisite: None
Corequisite: None

PHIL 1200 Applied and Professional Ethics 3 3/0/0
Meets MnTC Goal Areas 2 and 9. In this course students will explore ethical issues that arise in professional settings including business, medical and technical settings. The course will also look at the philosophical underpinnings of current professional policies and how philosophy can offer insights that can enhance and deepen such policies.
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 ecofeminism?
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 advancements 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

Course #	CourseTitle	CR	Lec/Lab/OJT

PHIL 2230 Existentialism 3 3/0/0
Meets MnTC Goal Areas 2 and 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 one is) over essence (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

PHIL 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 an introduction to meta-theory and the extensions of logic and will explore inductive logic.
Prerequisite: None
Corequisite: None

PHIL 2240 Non-Western Philosophical Perspectives 3 3/0/0
Meets MnTC Goal Areas 6 and 8. This course explores the standard introduction to philosophy-type questions (e.g. does God exist; are humans completely physical beings; can we 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 such questions have been pursued and answered in historically non-dominant cultures (i.e. Asian, Africana, 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

PHIL 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 concerning the nature 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, socialism, communism, fascism and anarchy with a particular interest in the evolution 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, ambulatory and industrial 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: PHRM2002 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 and a limited working knowledge in some major areas of physics.
Prerequisite: MATH0095
Corequisite: None

PHYS 1106 Fund of Physics - Mechanics 3 2/1/0
Meets MnTC Goal Area 3. 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: MATH1020
Corequisite: None

PHYS 1107 Physics of Music 3 3/0/0
Meets MnTC Goal Areas 3 and 6. 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 writing 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 Area 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, rocketry 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: MATH0095
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 kinetics 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 is 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 photonics, and nuclear physics. Lab equipment is used to illustrate these concepts. A mastery 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

PHYS 1411 University Physics I 5 3/2/0
Meets MnTC Goal Area 3. This course, which is open to all students but especially suited for engineering students, gives a theoretical and practical introduction to physics for math, science and engineering majors. It is a calculus-based course. Topics include kinetics of 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 as well as knowledge of calculus and trigonometry is essential for success in this course. The ability to use computers for creating reports and spreadsheets is needed for lab work. Lab is required.
Prerequisite: MATH1134
Corequisite: None

PHYS 1412 University Physics II 5 3/2/0
Meets MnTC Goal Area 3. This course is open to all students but is especially suited for engineering students. The course is a continuation of Physics 1411, University Physics I. However, it may be taken without having taken Physics 1411. Topics include thermodynamics, selected topics in electricity and magnetism, DC and AC circuit theory, optics, light and electromagnetic radiation, atomic physics, spectroscopy, lasers, photonics and nuclear physics. Lab equipment is used to illustrate these concepts. A mastery of college algebra as well as knowledge of calculus and trigonometry is essential for success in this course. Lab is required.
Prerequisite: MATH1134
Corequisite: None

PHYS 2970 Internship Experience 1--3 None
This course is designed to provide the student with a monitored meaningful work experience related to his or her field of interest. This experience will increase employability and enhance 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 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.
Prerequisite: Instructor approval
Corequisite: None

PLBG 1101 Piping and Job Safety 2 2/0/0
This course introduces the student to the plumbing profession. Topics include history, safety, basic applied math, fundamentals of rigging and hand signals to equipment operators.
Prerequisite: None
Corequisite: None

PLBG 1103 Plumbing Trade Tools 2 2/0/0
This course introduces common hand and power tools and product-specific tools used in the plumbing trade. Emphasis will be on the safe and proper use and maintenance of these tools.
Prerequisite: None
Corequisite: None

PLBG 1115 Faucets and Fixtures 2 2/0/0
This course covers various faucets and fixtures used in plumbing, including residential and commercial fixtures, their installation and application.
Prerequisite: None
Corequisite: None

PLBG 1119 Materials and Fittings 4 4/0/0
This course introduces the materials and fittings used in the plumbing trade, including copper, plastics, brass, polymers, cast iron, black iron and glass. The application of these material types will be covered, as well as fitting names and their uses.
Prerequisite: None
Corequisite: None

PLBG 1123 Plumbing Code I 3 3/0/0
This course introduces and familiarizes students with the Minnesota Plumbing Code and the North Dakota Plumbing Code. Definitions and miscellaneous statutes related to the plumbing codes will be covered.
Prerequisite: None
Corequisite: None

PLBG 1125 Plumbing Lab I 2 0/2/0
In this course students will meet with the instructor for the purpose of applying, demonstrating and reinforcing content covered in lecture courses.
Prerequisite: None
Corequisite: PLBG1101 AND PLBG1103 AND PLBG1115 AND PLBG1119 AND PLBG1123

PLBG 1131 Grade and Elevation 2 2/0/0
This course covers grade and elevation as it pertains to pipe installation. Emphasis will be on identification and proper use of needed tools and the methods and calculations used in determining grade and elevation.
Prerequisite: None
Corequisite: None

PLBG 1133 Blueprint Reading 2 2/0/0
This course covers different types and sections of blueprints, including the different views and key points a plumber will need to understand. Interpreting isometrics also will be covered. Specification sheets will be introduced and their importance explained.
Prerequisite: None
Corequisite: None

PLBG 1135 Drainage, Waste and Venting 4 4/0/0
This course covers drainage, waste and venting (DWV) as required in the Minnesota Plumbing Code and the North Dakota Plumbing Code. Emphasis is on differences between types of drainage, waste and venting systems and applying the code regulations in sizing the systems. Drawing isometrics for a DWV system will be covered.
Prerequisite: None
Corequisite: None

PLBG 1137 Water Distribution 3 3/0/0
This course will familiarize the learner with water supply and distribution and the rules for sizing a water supply system as applicable to the Minnesota Plumbing Code and the North Dakota Plumbing Code. Drawing isometrics will be introduced.
Prerequisite: None
Corequisite: None

PLBG 1139 Backflow Basics 2 2/0/0
This course introduces backflow basics by covering types of backflow devices, their construction, the areas of application for the devices and the scope of their use. The requirements for licensure will be covered.
Prerequisite: None
Corequisite: None

PLBG 1141 Plumbing Code II 3 3/0/0
This course covers application of the plumbing code regulations of Minnesota and North Dakota for the installation of residential and commercial fixtures, material and fittings.
Prerequisite: None
Corequisite: None

PLBG 1145 Plumbing Lab II 2 0/2/0
In this course students will meet with the instructor for the purpose of applying, demonstrating and reinforcing content in the concurrent courses being taken online.
Prerequisite: None
Corequisite: PLBG1131 AND PLBG1133 AND PLBG1135 AND PLBG1137 AND PLBG1139 AND PLBG1141

PNSG 1200 Concepts of Nursing 2 2/0/0
This course explores the role of the practical nurse. The core values of integrity, holism, caring, patient-centeredness, diversity, excellence and ethics are introduced. Curriculum threads including the nursing process, critical thinking, communication, documentation, teamwork, self-awareness and evidence-based practice are integrated throughout the course.
Prerequisite: Acceptance into the practical nursing program
Corequisite: None

PNSG 1205 Nursing Pharmacology 3 3/0/0
This course will introduce the foundations of basic pharmacology within the scope of practical nursing. Curriculum threads including drug classifications, therapeutic effects, side effects, interactions and dosage calculations are integrated throughout the course.
Prerequisite: None
Corequisite: PNSG1207 AND BIOL2262 AND BIOL2263

PNSG 1207 Health Promotion I 5 3/2/0
This course will introduce the foundations of nursing care for diverse populations. Curriculum threads including nursing principles and application of safety, asepsis and infection control, data collection, medication administration, perioerative care, patient comfort, fluids and electrolytes, nutrition, laboratory values and diagnostics, and the integumentary system are integrated throughout the course.
Prerequisite: None
Corequisite: PNSG1200 AND BIOL2260 AND BIOL2261

PNSG 1209 Maternal Child Health 3 3/0/0
This course focuses on the nursing care of the maternal-child patient within the scope of the practical nurse. Curriculum threads including the female reproductive system and sexual health, peripartum nursing care, nursing care related to the newborn, infant, child and adolescent, and nursing care of the gynecological patient are integrated throughout the course.
Prerequisite: PSYC2222 AND PNSG1200
Corequisite: BIOL2262 AND BIOL2263

PNSG 1216 Practical Nursing Clinical I 5 0/5/0
This course introduces the student to patient-centered care within the scope of practical nursing. The student begins to demonstrate caring, integrity and holism with actual patients. The student applies principles of critical thinking, the nursing process and ethics while providing care to diverse patients. Curriculum threads of data collection, medication administration, documentation, safety and communication are integrated throughout this nursing course.
Prerequisite: American Heart Association Health Care Provider CPR AND PNSG1200 AND PNSG1207
Corequisite: PNSG1209 AND PNSG1217 AND PNSG1205

PNSG 1217 Health Promotion II 4 2/2/0
The course will expand on the foundations of health promotion, maintenance and restoration to a diverse population. Curriculum threads include pathophysiology, data collection, pharmacology and nursing care related to the musculoskeletal, respiratory, urinary, male reproductive and gastrointestinal systems.
Prerequisite: PNSG1207
Corequisite: BIOL2262 AND BIOL2263

PNSG 1221 Psychosocial Nursing 2 2/0/0
This course focuses on nursing care that assists with promotion and support of the emotional, mental and social well-being 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: PSYC2222
Corequisite: PNSG1200

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

PNSG 1226 Practical Nursing Clinical II 4 0/4/0
This course builds on patient-centered caring within the scope of practical nursing. The student will build on previously learned core 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

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, maintenance and management of complications. The student will demonstrate initiating and maintaining primary and secondary fluids, intravenous push medications, central line dressing changes, central line cap changes, dosage calculations and successful venipuncture. The role of the practical nurse in intravenous therapy is integrated throughout the course.
Prerequisite: PNSG1216
Corequisite: Current Practical Nursing Licensure

PNSG 1234 Nursing Roles 1 1/0/0
This course is an overview of practical nursing within health care. Curriculum threads including nursing history, health care delivery systems, health care trends, legal aspects, ethical issues and role transition are integrated throughout the course.
Prerequisite: PNSG1216
Corequisite: None

PNSG 1236 Practical Nursing Practicum 2 0/2/0
This capstone 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 multiple patients with excellence.
Prerequisite: PNSG1217 AND PNSG1214 AND PNSG1220 AND PNSG1223 AND PNSG1226 AND PNSG1232 AND PNSG1234
Corequisite: None

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 basic alterations in fluid and electrolytes, oxygenation, cardiac output and tissue perfusion, regulation and metabolism, cognition and sensation, immunity, integument, mobility, reproduction, ingestion/digestion/absorption/elimination, 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 nursing process provides a beginning framework for decision-making related to common health problems of adults and older adults. Principles of pathophysiology, nutrition and pharmacology are applied to basic health care concepts. A lab component includes focused assessments and basic nursing skills that support course concepts.
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

PNSG 1510 Practical Nursing Foundations 5 3/2/0
This course introduces key 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. This course includes 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 1512 Practical Nursing Pharmacology 2 2/0/0
This course incorporates the concepts of pharmacokinetics, pharmacodynamics, common adverse/side effects and contraindications to medication administration. Emphasis is placed on drug classifications and the role of the practical nurse in providing nursing care related to the safe administration of medications to individual patients across the age span.
Prerequisite: Acceptance into the Practical Nursing Program
Corequisite: None

PNSG 1514 Clinical I Practical Nurse Foundations 4 0/4/0
This clinical course provides the student an opportunity to apply nursing judgment using the nursing process to implement safe, patient-centered and relationship-centered care in selected settings. The student demonstrates focused assessments, data collection and implementation of skills learned in lab settings. The student documents findings and reinforces teaching plans for individual patients with common problems. The student develops communication and customer service skills while working with individual patients and team members.
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

PNSG 1518 Foundations of Adult Nursing Care II 5 3/2/0
This course incorporates the nursing process, 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 into the care of adults and older adults with complex and comorbid health disorders. Principles of pathophysiology, nutrition and pharmacology are applied. A lab component includes focused assessments and advanced nursing skills that support course concepts.
Prerequisite: BIOL2260 AND BIOL2261 AND PSYC2222 AND PNSG1508 AND PNSG1514
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: BIOL2260 AND BIOL2261 AND PSYC2222 AND PNSG1508 AND PNSG1514
Corequisite: None

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. Standards 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: BIOL2260 AND BIOL2261 AND PSYC2222 AND PNSG1508 AND PNSG1514
Corequisite: None

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 BIOL2260 AND BIOL2261 AND PNSG1508 AND PNSG1514
Corequisite: None

PNSG 1526 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: BIOL2260 AND PSYC2222 AND PNSG1500 AND PNSG1510 AND PNSG1512 AND PNSG1514
Corequisite: None

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 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.
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. AND BIOL2260 AND BIOL2261 AND PSYC2222 AND PNSG1508 AND PNSG1514
Corequisite: None

PNSG 1530 Nursing Care of Adults II 5 2/3/0
This course focuses on the care of adults with common medical and surgical health 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, integument, mobility, reproduction, ingestion, digestion, absorption, elimination, excretion, pre and post-operative care and oncology.
Prerequisite: BIOL2260 AND PSYC2222 AND PNSG1500 AND PNSG1510 AND PNSG1512 AND PNSG1514
Corequisite: None

POLS 1120 American National Government 3 3/0/0
Meets MnTC Goal Areas 5 and 9. This course provides an analysis of the organization, institutions and functions of the United States government.
Prerequisite: None
Corequisite: None

POLS 1130 State and Local Government 3 3/0/0
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.
Prerequisite: None
Corequisite: None

POLS 2204 Comparative Government 3 3/0/0
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.
Prerequisite: None
Corequisite: None

POLS 2206 Global Politics 3 3/0/0
Meets MnTC Goal Areas 5 and 8. This course is an introduction to the field of global and international politics, with an emphasis on the history, structure and processes of global relations. Students will study the role of state and non-state actors such as nations, international conflict, war, global economic relations and international organizations. The course will also address current global challenges such as terrorism, arms control, the use of foreign aid in the developing world and/or other pressing issues facing the international political system.
Prerequisite: None
Corequisite: None

POLS 2220 Introduction to Constitutional Theory 3 3/0/0
Meets MnTC Goal Areas 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 governmental powers, separation of powers, civil liberties, civil rights and federalism.
Prerequisite: None
Corequisite: None

POLS 2310 Ideas and Ideologies 3 3/0/0
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.
Prerequisite: None
Corequisite: None

POLS 2950 Introduction to Social Research 3 3/0/0
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, 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 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.
Prerequisite: MATH1020 AND ENGL1101 AND Completion of six (6) credits in SOC, PSYC, or POLS
Corequisite: None

PSYC 1101 Human Interaction 3 3/0/0
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.
Prerequisite: None
Corequisite: None

PSYC 1200 General Psychology 3 3/0/0
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 psychology, learning and memory, personality, social psychology, psychopathology and treatments, and states of consciousness such as sleep and dreams.
Prerequisite: None
Corequisite: None

PSYC 1201 Introduction to Mental Health Behavioral Aide 4 4/0/0
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 entry-level 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 a Goal Area 5 course. This course is designed for students enrolled in the Mental Health Behavioral Aide II certificate program.
Prerequisite: None
Corequisite: None

PSYC 1500 Positive Psychology 3 3/0/0
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.
Prerequisite: None
Corequisite: None

PSYC 2220 Abnormal Psychology 3 3/0/0
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.
Prerequisite: None
Corequisite: None

PSYC 2222 Lifespan Development 3 3/0/0
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.
Prerequisite: None
Corequisite: None

PSYC 2224 Social Psychology 3 3/0/0
Meets MnTC Goal Areas 5 and 7. 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.
Prerequisite: None
Corequisite: None

PSYC 2226 Behavior and Environmental Management 3 3/0/0
Meets MnTC Goal Areas 2, 5 and 10. 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.
Prerequisite: None
Corequisite: None

PSYC 2230 Personality Psychology 3 3/0/0
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.
Prerequisite: None
Corequisite: None

PSYC 2302 Cross-Cultural Psychology 3 3/0/0
Meets MnTC Goal Areas 5 and 7. 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 as well as between cultures. A range of substantive areas within psychology will be examined and compared across multiple cultures, including cognitive, social, health and developmental psychology.
Prerequisite: None
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

PSYC 2900 Statistics for Behavioral and Social Sciences 4 3/1/0
Meets MnTC Goal Area 5. Students use will 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 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, 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, overhaul 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

Course #	CourseTitle	CR	Lec/Lab/OJT

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 electrical 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. Student 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 1/2/0
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 where 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 motorcycle suspension 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 2/0/0
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 information 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 3/2/0
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. Basic techniques in venipuncture, contrast media types, intravenous medication and emergency response will also be included.
Prerequisite: RADT1102
Corequisite: RADT1112 AND RADT1116

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 for image evaluation and 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 be discusses as well. In addition the student will be introduced to highly specialized studies of the central nervous system, cardiovascular, lymphatic system and cross-sectional imaging. Special imaging equipment, physical settings and techniques used in these highly 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 extremity, 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 acquire and build skills in performing radiographic procedures 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 RADT2110

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 RADT2100

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, ultrasound and magnetic resonance imaging.
Prerequisite: RADT2100 AND RADT2110 AND RADT2224
Corequisite: RADT2280 AND RADT2130

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: RADT2100 AND RADT2110 AND RADT2224
Corequisite: RADT2120 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: RADT1180 AND RADT1190
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: REFR1104 AND REFR1108
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.
Prerequisite: None
Corequisite: None

REFR 2202 Commercial Refrigeration and Air Conditioning Principles 4 4/0/0
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 operation and aid 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 lab sessions on commercial refrigeration 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, industrial, hospital and supermarket refrigeration systems. Safety is emphasized.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT

REFR 2215 Advanced Electrical Applications 3 0/3/0
This course covers the application of electrical principles used in commercial, industrial, hospital and supermarket refrigeration systems. Safety is emphasized.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

REFR 2216 Refrigeration Internship 3 0/0/3
In this course, projects, reports and discussions are coordinated to relate to the student's employment situation, which must be in an approved refrigeration or air conditioning occupation. A training agreement and an evaluation are required of each student.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

REFR 2217 Commercial Grocery Store Refrigeration 3 3/0/0
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.
Prerequisite: Completion of HVAC/R diploma.
Corequisite: None

SOC 1111 Introduction to Sociology 3 3/0/0
Meets MnTC Goal Areas 2, 5 and 7. This course is an introduction to the study of societies and the social factors that influence individual and group behavior. The course incorporates sociological and other critical thinking models for the investigation of various components of social life: culture, socialization, social organization, social stratification, social institutions, populations dynamics and social change.
Prerequisite: None
Corequisite: None

SOC 1113 Social Problems 3 3/0/0
Meets MnTC Goal Areas 5 and 9. This course stresses acquiring an enriched understanding of social issues and prospects for improving them. Students will investigate social trends and factors affecting social problems, contrast sociological perspectives of social problems, deal constructively with information and ideas associated with social issues, examine the ethical dimensions inherent in problem definition and intervention design, and define personal and public responsibilities in relation to select social issues. Social issues covered may include parenting and family issues; crime, delinquency and violence; aging, health and health care issues; poverty and inequality; cultural pluralism; urban growth and population; environmental issues; sexual issues; and global issues.
Prerequisite: None
Corequisite: None

SOC 1114 Sociology Service Learning 1 1/0/0
Meets MnTC goal Area 5. This course emphasizes an enriched understanding of social issues and prospects for improving them through direct work/research in a sociological setting. In an actual community setting, students will participate in and make observations of social intervention. These observations will be critically processed in relation to key sociological concepts. The nature of service learning usually necessitates that students be prepared to be off-campus and to participate outside of regular class hours (20-25 hours). Students may need transportation to field sites. Additional expenses may be incurred. Course may be repeated for credit.
Prerequisite: SOC1111 OR SOC1113 OR SOC2211 OR SOC2215 OR SOC2216 OR SOC2217 OR WMST1130
Corequisite: None

SOC 2210 Social Deviance 3 3/0/0
This course is a sociological examination of significant rule-making and rule-breaking that surveys explorations/explanations of non-conformity relevant to juvenile delinquency, crime, health and environmental welfare, mental illness, sexual violence, substance abuse and certain other non-normative lifestyles
Prerequisite: SOC1111
Corequisite: None

SOC 2213 Sociology of the Family 3 3/0/0
Meets MnTC Goal Areas 5 and 7. Families will be examined from the sociological perspective and will be compared across time and cultures. Family relationships, family structure and the effects of race, class, gender, age, social institutions and social policy will be explored in this course. Integral to this course are comprehensive discussions on topics such as dating, cohabitation, marriage/partnering, employment, domestic violence, parenting, divorce, remarriage/re-partnering and elder care. This course provides understanding of the family, family roles and the impact on the individual. Understanding public and private, platonic and intimate relationships can assist in the development of tolerance toward others.
Prerequisite: None
Corequisite: None

SOC 2215 Criminology 3 3/0/0
Meets MnTC Goal Areas 2 and 5. This course will provide a thorough overview of the field of criminology: the study of the theories which attempt to define and explain crime, criminal behavior and society's reactions to crime, including a focus on juvenile delinquency, the judicatory process and penology.
Prerequisite: None
Corequisite: None

SOC 2216 Minority Group Relations 3 3/0/0
Meets MnTC Goal Areas 5 and 7. This course stresses acquiring an enriched understanding of social issues and prospects for improving them. Students will investigate social trends and factors affecting social problems, contrast sociological perspectives of social problems, deal constructively with information and ideas associated with social issues, examine the ethical dimensions inherent in problem definition and intervention design, and define personal and public responsibilities in relation to select social issues.
Prerequisite: None
Corequisite: None

SOC 2217 Rural Sociology 3 3/0/0
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 mosaic found in rural scenarios.
Prerequisite: None
Corequisite: None

SOC 2220 Food, Culture and Society 3 3/0/0
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 ethnicity.
Prerequisite: None
Corequisite: None

SOC 2222 Sociology of Agriculture 3 3/0/0
Meets MnTC Goal Area 5. The central theme of this course is to understand the institutions and processes critical to farm success. Students will utilize sociological perspectives to study the many aspects of a local food system.
Prerequisite: None
Corequisite: None

SOC 2950 Introduction to Social Research 3 3/0/0
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, 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 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.
Prerequisite: MATH1020 AND ENGL1101 AND Completion of six (6) credits in SOC, PSYC, or POLS
Corequisite: None

SOMM 1400 Social Media Visual Methods 3 2/1/0
In this course, students will learn introductory-level skills that will prepare them to create visual content relevant for today's most widespread social media platforms. Various visual methods and media will be taught, such as static graphic design layout, still photography and videography. Throughout this course, students will be instructed to create visual content that will focus on technical proficiency, core design principles, brand consistency, user experience and user engagement strategies.
Prerequisite: MKTG1200 AND MKTG1116
Corequisite: None

SOMM 2200 Social Media Management 3 2/1/0
This course will instruct students on the basics of social media management, primarily from a business and marketing perspective. An emphasis will be placed on industry-established planning, management and measurement processes. Students will learn the tools necessary to manage a company's social program at any point, from setting up a program from scratch to performing ongoing maintenance and assessment that will ensure continued success.
Prerequisite: MKTG1200
Corequisite: None

SOMM 2300 Social Media Campaigns 3 2/1/0
In this course, students will apply their accumulated knowledge and skills to produce integrated social media campaigns. Campaign projects will involve activities that are designed to imitate industry practices and processes, allowing students to experiment with the tools they'll use on the job. Students will independently complete research and planning, produce original content and analyze the results of their campaign following its completion.
Prerequisite: MKTG1200 AND MKTG1116
Corequisite: None

SPAN 1111 Beginning Spanish I 4 4/0/0
This course provides basic instruction in the correct form and use of the Spanish language. Study concentrates on oral and written comprehension of simple Spanish, verbal expression of personal themes, pronunciation and grammar.
Prerequisite: None
Corequisite: None

SPAN 1112 Beginning Spanish II 4 4/0/0
This course provides continued basic instruction in the correct form and use of the Spanish language. Study concentrates on oral and written comprehension of simple Spanish, verbal expression of personal and extended themes, pronunciation and grammar.
Prerequisite: SPAN1111
Corequisite: None

SPAN 2211 Intermediate Spanish I 4 4/0/0
Meets MnTC Goal Area 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.
Prerequisite: SURT1200 AND SURT1210
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 expands 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, special issues and an introduction to some 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 stokes 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 boney landmarks. They will learn muscle origin and insertion using specific boney 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. Specialization 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. Emphasis will be placed on the use of proper body mechanics and the use of proper 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 cerified CPR/First Aid card holder
Corequisite: None

THPY 1146 Certification Preparation 2 2/0/0
This course is designated to prepare the students to take the National Certification Examination (NEC) issued by the National Certification Board of Therapeutic Massage & Bodywork (NCBTMB). Students will review anatomy, physiology, kinesiology, clinical pathology, massage theory, 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 2 2/0/0
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 3 3/0/0
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 2102 Lymphatic and Hospice Massage 1 0/1/0
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 2 0/2/0
Students will reinforce previously learned techniques. Students will consider various treatment protocols utilizing scientifically proven, outcome-based techniques including neuromuscular therapy, myofascial release, travel trigger point therapy, muscle energy technique, 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 supplementary 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 3 3/0/0
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 explore the elements of performance and of different theatre spaces and the roles and duties of different theatre artists involved in a production. Students will engage in theatrical criticism and analyze dramatic text and literature. Students also develop knowledge of live theatre by experiencing the theatre arts in practice and engaging with theatre artists. Participation in class projects, production attendance and production work hours may be required.
Prerequisite: None
Corequisite: None

THTR 1105 Acting I 3 3/0/0
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 2 0/2/0
Meets MnTC Goal Area 6F. 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 2 0/2/0
Meets MnTC Goal Area 6F. 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 3 2/1/0
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 3 2/1/0
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 a collaborative theatrical production and 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 3 3/0/0
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 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 2130 Design for the Stage 3 2/1/0
Meets MnTC Goal Area 6. This course introduces students to the concepts, processes and practices common to the design of stage scenery, lighting, sound and costumes. Students will 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 1 1/0/0
Students will obtain the information necessary to complete MnDOT CDL written exam.
Prerequisite: None
Corequisite: None

TRDR 1103 Commercial Driver's License II 1 0/1/0
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 Drivers License. Students 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 3 2/1/0
This course covers the basics in many types of fuel systems used on current 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. Included in this course will be practices of pre-delivery, inspection and troubleshooting along with seasonal service requirements.
Prerequisite: None
Corequisite: None

TRNS 1003 Off-Road Literature and Computer Systems 2 1/1/0
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 2 1/1/0
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 4 2/2/0
This off-road maintenance course is designed to train the student on techniques of proper 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

TRNS 1015 Ignition, Charging and Starter Systems Lab 2 0/2/0
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.
Prerequisite: TRNS1005
Corequisite: None

TRNS 1016 Ignition, Charging and Starter Systems Theory 1 1/0/0
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.
Prerequisite: None
Corequisite: None

TRNS 1100 Introduction to Shop Technology 4 3/1/0
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.
Prerequisite: None
Corequisite: None

TRNS 1102 Introduction to Transportation 2 1/1/0
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.
Prerequisite: None
Corequisite: None

TRNS 1104 Transportation Electronics 3 2/1/0
This course prepares the student for the electronics-related courses that follow. The theory and operation of electricity and test instruments will be studied.
Prerequisite: None
Corequisite: None

TRNS 1111 Electrical Systems I 4 2/2/0
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 1112 Heating Ventilation A/C 3 1/2/0
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.
Prerequisite: DSET1100 OR TRNS1102
Corequisite: None

TRNS 1118 Welding I 2 0/2/0
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.
Prerequisite: None
Corequisite: None

TRNS 1120 Welding II 1 0/1/0
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.
Prerequisite: TRNS1118
Corequisite: None

TRNS 1125 Starting and Charging Theory 2 2/0/0
This course covers the service and repair of starting and charging systems for off-road products, both two- and four-stroke.
Prerequisite: None
Corequisite: TRNS1126

TRNS 1126 Starting and Charging Lab 1 0/1/0
This course covers the hands-on testing of starting and charging systems and their components.
Prerequisite: None
Corequisite: TRNS1125

TRNS 1193 Fuel Systems II Lab 1 0/1/0
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.
Prerequisite: None
Corequisite: TRNS1194

TRNS 1194 Fuel Systems II Theory 2 2/0/0
This course covers the basics in many types of fuel systems used on current 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.
Prerequisite: None
Corequisite: None

TRNS 1195 Fuel Systems I Marine Service 1 0/1/0
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.
Prerequisite: None
Corequisite: TRNS1194

TRNS 1197 Electrical Systems I Lab 2 0/2/0
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.
Prerequisite: None
Corequisite: TRNS1198

TRNS 1198 Electrical Systems I Theory 2 2/0/0
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.
Prerequisite: None
Corequisite: None

TRNS 1199 Electrical Systems I Marine Service 2 0/2/0
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 operation. Students will also be exposed to proper troubleshooting techniques of these systems. This course is intended for the Marine program student and applies specifically to marine products.
Prerequisite: None
Corequisite: TRNS1198

TRNS 2108 Power Hydraulics 2 1/1/0
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 performed. System troubleshooting as well as component service will also be included in this course.
Prerequisite: None
Corequisite: None

WEBD 1000 Foundations of Web Design 3 1/2/0
In this course, students will be introduced to the foundational concepts necessary for a career in Web design. Students will explore the Web Design & Development program, research career paths and review technical skills needed to succeed in the field. Students will explore the foundational components of design as they apply to the Web design field.
Prerequisite: None
Corequisite: None

WEBD 1010 HTML 3 1/2/0
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.
Prerequisite: None
Corequisite: None

WEBD 1020 Photoshop 3 1/2/0
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.
Prerequisite: None
Corequisite: None

WEBD 1030 Multimedia 3 1/2/0
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.
Prerequisite: None
Corequisite: WEBD1010

Course #	CourseTitle	CR	Lec/Lab/OJT

WEBD 1040 Foundations of Web Development 3 1/2/0
In this course, students will be introduced to the foundational concepts necessary for a career in Web development. Students will review technical skills needed to succeed in the field. Students will explore the foundational components of development and programming as they apply to the Web development field.
Prerequisite: None
Corequisite: None

WEBD 1110 Cascading Style Sheets 3 1/2/0
This course focuses on the use of cascading style sheets (CSS) in the creation of Web pages. Students will create and utilize CSS to provide sophisticated page layout and design for Web pages and websites. The course emphasizes standards-based design with CSS and testing sites for maximum browser compatibility.
Prerequisite: WEBD1010
Corequisite: None

WEBD 1120 User Experience Design 3 1/2/0
In this course, students will gain a hands-on understanding of user experience (UX) design practices. Students will develop an overview of the facets of user experience thinking and how they can be utilized to improve project design. Students also will acquire a practical strategy for incorporating user experience techniques into the implementation of projects.
Prerequisite: WEBD1000
Corequisite: None

WEBD 1130 Electronic Commerce 3 1/2/0
This course introduces emerging online technologies and trends and their influence on the electronic commerce marketplace. Students will learn various revenue models and how to market on the Web. The course introduces online auctions and various legal and ethical issues. Students will learn about important security issues such as spam and phishing. Students will learn how to plan for electronic commerce and develop an online marketing plan.
Prerequisite: None
Corequisite: None

WEBD 1140 JavaScript 3 1/2/0
This course introduces client-side development with JavaScript and jQuery. Students will learn how to create dynamic Web pages using JavaScript to add functionality and interactivity. Basic JavaScript syntax and usage, jQuery and other JavaScript libraries, and client-side security issues will be examined.
Prerequisite: WEBD1010
Corequisite: None

WEBD 1150 PHP and MySQL 3 1/2/0
This course introduces server-side development with PHP and relational database concepts with MySQL. Students will learn how these technologies work together to develop dynamic, database-driven websites. Basic PHP syntax and usage, SQL queries, database connections and server-side security issues will be examined.
Prerequisite: WEBD1040
Corequisite: None

WEBD 2000 Web Projects I 3 1/2/0
In this class, students will utilize the knowledge learned in previous classes to create websites and applications with emphasis on client-side technologies. The focus of this course is a top-down approach whereby students are assigned a project, assess the needs of the project and develop a project plan. Students will then identify what it will take to complete that Web project. Students will participate in group-based development activities, learn traditional project management techniques and implement technologies as needed to create a working system.
Prerequisite: WEBD1110 AND WEBD1120
Corequisite: None

WEBD 2010 Content Management Systems 3 1/2/0
This course will introduce students to powerful Web-based content management systems (CMS) used to simplify the editing of content on websites through a wide variety of plugins and themes. Students will explore how to build dynamic websites using CMS, starting with installing the CMS and working all the way through customizing the CMS with themes, plugins and application programming interfaces (APIs).
Prerequisite: WEBD1110 AND WEBD1140
Corequisite: None

WEBD 2020 User Interface Design 3 1/2/0
Students will learn the concepts and skills necessary for designing the user interface (UI) of websites and applications for the targeted user. This course is focused on the UI design process, with emphasis on the important topics of visual design, writing for the Web and accessibility.
Prerequisite: WEBD1110 AND WEBD1000
Corequisite: None

WEBD 2030 Search Engine Optimization 3 1/2/0
In this course, students will learn the components needed to effectively create and employ search engine optimization (SEO). The importance of file and site structure, proper meta tagging, hyperlinking and correctly composed content will be addressed. Students also will understand how to properly use analytics engines, targeted advertisements and various SEO tools to maximize their search engine results, as well as monitor and improve them over time.
Prerequisite: WEBD1010 AND WEBD1130
Corequisite: None

WEBD 2040 Web Applications I 3 1/2/0
Web applications are comprehensive websites that utilize multiple client and server-side tools and technologies. Students will use the knowledge learned in previous classes to develop client-side code used to create and manipulate Web applications. Students will utilize project-planning skills and problem-solving techniques to design and develop effective applications. The use of new technologies used to create rich Internet applications and frameworks will also be discussed.
Prerequisite: WEBD1140
Corequisite: None

WEBD 2100 Web Projects II 3 1/2/0
Students will utilize the knowledge gained in previous classes to create Web applications with client-side and server-side technologies. The focus of this course is a top-down approach whereby students are assigned a project, assess the needs of the project and develop a project plan. Students then identify what it will take to complete that Web project. Students will participate in group-based development activities, learn rapid application development project management techniques and implement technologies as needed to create a working system.
Prerequisite: WEBD2000
Corequisite: None

WEBD 2110 Web Portfolio 3 1/2/0
In this course, students will plan, design and create a professional portfolio using Web technologies. The purpose of the portfolio is to showcase the student's accomplishments in the student's major field and provide the student with a concrete representation of his or her skills and abilities. Other topics include resume creation, job interview preparation, job search strategies and the ability to explain and articulate portfolio samples.
Prerequisite: WEBD2000 AND WEBD2020
Corequisite: None

WEBD 2120 Mobile Applications 3 1/2/0
This course teaches application development for mobile operating systems and the Web. Focus will be on the creation of Web and platform-specific mobile applications. User experience design, user interface design, data access and Internet connectivity will be employed to create effective mobile applications.
Prerequisite: WEBD2020
Corequisite: None

WEBD 2140 Web Applications II 3 1/2/0
Web applications are comprehensive websites that utilize multiple client and server-side tools and technologies. Students will use the knowledge learned in previous classes to develop server-side programs used to create and manipulate Web applications, files, email, and databases. Students will utilize project-planning skills and problem-solving techniques to design and develop effective applications.
Prerequisite: WEBD1150
Corequisite: None

WMST 1130 Introduction to Women's Studies 3 3/0/0
Meets MnTC Goal Areas 5 and 7. This course is an interdisciplinary study designed to enhance the student's understanding of women's cultural, social, historical, political and economic contributions and humanitarian achievements based on historical and diverse societal settings.
Prerequisite: None
Corequisite: None

WMST 1136 Global Perspectives of Women 3 3/0/0
Meets MNTC Goal Areas 6 and 8. This course examines the present-day realities of women's lives around the world.
Prerequisite: None
Corequisite: ENGL1101

ZOO 1122 Hematology and Coagulation 4 3/1/0
This is an introductory course for Medical Laboratory Technician students covering the production, maturation, function and abnormalities of blood cells and coagulation (stoppage of bleeding) 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.
Prerequisite: None
Corequisite: None

ZOO 1123 Immunohematology 3 2/1/0
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: BIOL1125
Corequisite: None

ZOO 1126 Urinalysis and Body Fluids 2 1/1/0
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 of, analysis of physical and chemical properties and identification of morphological elements 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: None
Corequisite: None

Course #	CourseTitle	CR	Lec/Lab/OJT	Course #	CourseTitle	CR	Lec/Lab/OJT

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MA, University of Minnesota
EdD, University of Minnesota

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BS, Southwest State University
MS, South Dakota State University
EdD, University of South Dakota

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BS, Minnesota State University Moorhead
MS, Central Connecticut State University

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MAT, Minnesota State University, Mankato

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AA, Fergus Falls Community College
BA, Concordia College
MS, Capella University
PhD, Capella University

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AA, Ridgewater College
BA, University of Washington
MAT, City University

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MS, University of California-Davis
BSE, University of Iowa

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MSN, University of South Alabama

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MBA, Southwest Minnesota State University

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BE, Wayne State College
MED, Iowa State University

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BS, University of Mary
MS, University of Mary
MBA, University of Mary

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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

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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

Faculty Credentials

Ahlschlager, Patricia M ..... *Nursing*
BS, Metropolitan State College of Denver
MS, Minnesota State University Moorhead

Amundson, Sarah..... *Nursing*
BSN, North Dakota State University

Anderson, Heidi Rochelle ..... *English*
AA, Minnesota State Community and Technical College
BA, St. Cloud State University
MA, St. Cloud State University
MA, Minnesota State University-Moorhead

Anderson, Marc David ..... *Biology*
BS, North Dakota State University
MS, North Dakota State University
PhD, Iowa State University

Anderson, Sue Christine ..... *Art*
BS, Minnesota State University Moorhead
MS, Minnesota State University Moorhead

Anderson, Terri ..... *Nursing*
MSN, Capella University
BSN, University of North Dakota

Andres, Rebecca ..... *Biology*
BS, North Dakota State University
MS, North Dakota State University

Ashworth, Teresa K..... *Music*
BA, University of South Dakota
MED, North Dakota State University

Bagent, Jack Kevin ..... *Science*
BA, University of Minnesota
DR, University of Minnesota

Bagent, Karoline Lisa ..... *Nursing*
MN, University of Minnesota

Bagne, Angela Grace Beach ..... *Psychology*
MS, North Dakota State University

Bainer, James Stephen..... *Diesel Equipment Technology*
DIPL, Staples Area Vocational Technical Institute

Baker, Adam Joseph, CPA ..... *Accounting*
AA, Fergus Falls Community College
BS, Minnesota State University Moorhead

Baker, Randy ..... *Gas Utility Construction and Service*

Balluff, Mark Allen ..... *Math*
BS, Minnesota State University Moorhead
MAT, Minot State University

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BS, University of Delhi
MS, Indian Institute of Technology, Kanpur
MA, Indian Institute of Technology, Delhi
PhD, University of Vigo

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Beacom, Teresa Ann ..... *English*
BA, College of Saint Benedict
MA, University of Missouri-Kansas City

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BS, University of Mary

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PhD, Wichita State University

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EDD, University of St. Thomas
BA, University of Wisconsin- Superior

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AS, Rochester Community and Technical College
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Bernstetter, Roberta A ..... *Cosmetology*
AA, Fergus Falls Community College
DIPL, Northwest Technical College - Wadena
BS, Bemidji State University

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MS, North Dakota State University

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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
DIPL, Detroit Lakes Technical College
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Burke, Mikki.....*Biology*
MSW, University of Minnesota- Twin Cities
PHD, University of Florida

Cantieri, Loretta .....*Art*
BFA, University of Illinois at Urbana
MFA, California Insitute of the Arts

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BS, Bemidji State University

Carter, Daniel J..... *Computer and Network Technology*
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Caswell, Ramona L. Johnson .....*Chemistry*
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AAS, Minnesota State Community and Technical College
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Cossette, Rebecca..... *Psychology*
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BFA, University of Minnesota, Duluth
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AAS, Northwest Technical College-Moorhead
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BS, Moorhead State University

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BA, University of Western Ontario, Huron College
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Dahms, Shannon Kaye ..... *Nursing*
BSN, Viterbo College
MSN, Minnesota State University Moorhead

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BA, University of North Dakota
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MS, Northeastern University

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AAS, Minnesota State Community and Technical College
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AA, Bemidji State University
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Frider, Debra K ..... *Dental Hygiene*
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Faculty Credentials

Froslee, Mick ..... *Psychology*
MA, Webster University
PHD, Walden University

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MS, Northern Illinois University

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PhD, Syracuse University

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BA, Luther College

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AAS, Minnesota State Community and Technical College
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Haataja, Keith ..... *Electrical Technology*
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Hagen, LeRoy Dean ..... *Dental Hygiene*
DDS, School of Dentistry Marquette University

Halling, Melissa ..... *Math*
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MA, Eastern Kentucky University

Haltli, Russell Alan ..... *Electrical Technology*
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Hanna, Susan ..... *Health Information Technology*
AS, Minnesota State University Moorhead
BS, Minnesota State University Moorhead

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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

Faculty Credentials

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*
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MS, Moorhead State University

Hibma, Jody Carroll..... *Biology*
AS, Worthington Community College
BS, South Dakota State University
MS, Central Michigan University

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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

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MS, North Dakota State University

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AAS, University of Minnesota, Crookston
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Iverson, James..... *Music*
BA, Concordia College
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BA, Minnesota State University Moorhead
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BSED, Mayville State University

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BS, Minnesota State University-Moorhead

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MFA, University of North Dakota

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PhD, University of Delaware

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MAT, University of Wisconsin Eau Claire

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MMA, University of Mary

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BSN, Minnesota State University-Moorhead

Faculty Credentials

Keller, Brian, CPA.....*Accounting*
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BS, North Dakota State University

King, Steven J.....*Physical Education, Athletic Director*
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BA, St. Cloud State University
MA, Northern State University

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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*
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Lacher, Marcus J.....*Business/Computers*
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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
MSED, 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

Faculty Credentials

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

Nielson, 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 Uhde ..... *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

Faculty Credentials

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 ..... *Pyschology*
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BS, St. Cloud State University
MS, St. Cloud State University

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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

Schiltz, Lea ..... *Nursing*
AAS, Minnesota State Community and Technical College
AA, Minnesota State Community and Technical College
BSN, University of Mary

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*
AA, Minnesota State Community and Technical College
BS, North Dakota State University
Pharm D, 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

Ullmer, 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

Faculty Credentials

Staff

Lynn Aasen ..... *General Maintenance Worker*

Megan Adamczyk ..... *K-12 Collaboration Manager*

Sharlene Allen ..... *College Registrar*

David Anderson ..... *General Maintenance Worker*

Douglas Andring ..... *Assistant Human Resources Director*

Rhonda Bahls ..... *Administrative Assistant*

Laura Baier ..... *Academic Advisor*

Lynn Bakke ..... *Call Center Resource Specialist*

Heidi Balgaard ..... *Human Resources Associate*

Nicole Ballard ..... *Administrative Assistant*

Tina Bartels ..... *Senior Graphic Designer*

Bonnie Baumgardner ..... *Campus Resource Specialist*

Paul Beah ..... *General Maintenance Worker*

Allen Behr ..... *Director of Business Services*

Richard Bellefeuille ..... *General Maintenance Worker*

Alecia Bement ..... *Administrative Assistant*

Rachel Bergerud ..... *Bookstore Coordinator/Account Clerk*

Jennifer Bieniek ..... *Academic Advisor*

Patrick Billodeau ..... *Front End Web Developer*

Joanne Bokinskie ..... *Assistant to the Vice President of Student Development and Marketing*

Mary Braunberger ..... *Exam Monitor*

Christian Breczinski ..... *Director of Student Development Services*

Laurie Brekke ..... *Campus Resource Specialist*

Denice Brewer ..... *Administrative Assistant*

Shannon Britten ..... *Enrollment Manager*

Penny Brynildson ..... *Academic Advisor*

Karen Buboltz ..... *Director of Student Development Services*

Michele Burns ..... *Academic Advisor*

Alyssa Campion ..... *Interim Director of Admissions and Outreach*

Pamela Canning ..... *Campus Resource Specialist*

Thomas Capistran ..... *Facilities Services Supervisor*

Janice Carpenter ..... *Purchasing Account Clerk*

Kevin Clark ..... *General Maintenance Worker*

Janine Corbin ..... *Accounts Payable Specialist*

Tori Covington ..... *Account Clerk Senior/ Campus Administrative Support*

Tracy Crawford ..... *IT Help Desk*

Abby Crowser ..... *Solution Center Resource Specialist*

Deborah Dague ..... *Associate Registrar*

Bonnie Dahring ..... *Associate Director, Financial Aid*

Christopher DeBaere ..... *IT Help Desk*

Bethany Dertinger ..... *Accountant*

Christi Dickey ..... *Associate Director, Financial Aid*

Cynthia Doll ..... *Interim College Registration Associate*

Cindy Dukowitz ..... *General Maintenance Worker Lead*

David Dumbeck ..... *Data Systems Architect*

Sherry Dykhoff ..... *Exam Monitor*

Scott Ebsen ..... *Director of Student Development Services*

Patricia Ekren *Account Clerk Senior/Foundation Financial Specialist*

Diane Ellwanger ..... *Food Service Worker*

Daniel Elstad ..... *IT Help Desk*

Carissa Engstrom ..... *Enrollment Manager*

Najib Farah ..... *General Maintenance Worker*

Allison Fast ..... *Project Coordinator, Strategic Prevention Framework Partnership for Success*

Mary Frendin ..... *College Registration Associate*

Karen Gabrielson ..... *Account Clerk*

Randy George ..... *General Maintenance Worker*

Marisa Gonzalez ..... *College Social Worker*

Marcia Goodyear ..... *Administrative Assistant*

Kim Gould ..... *Campus Resource Specialist*

Sally Gruver ..... *Accounts Receivable Clerk*

Judith Hacking ..... *Library Technician*

Darren Hage ..... *IT Help Desk*

Cheri Hagen ..... *Library Technician*

Staff

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 Jenson ..... *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*

Julianna Lindsey ..... *Call Center Resource Specialist*

Eugenie Loeffler ..... *Exam Monitor*

Christina Loreth ..... *Bookstore Coordinator*

Jacqueline Lysdahl ..... *College Registration Associate*

Jacquelyn Maethner ..... *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*

Staff

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 Rolczynski ..... *Administrative Assistant*

Cheryl Rotz ..... *Campus Resource Specialist*

Leslie Rudrud.. *Associate Director, Financial Aid / Grant Admin Asst.*

Arthur Saylee ..... *General Maintenance Worker*

Jonathan Schaan ..... *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 Sieling ..... *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 Soukup ..... *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 Stroot ..... *Account Clerk*

Lori Stuhaug ..... *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*

Breanna 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*

Staff

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.

Directions to Campuses

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 right.

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.

NOTES

Minnesota State
Community and Technical College

DETROIT LAKES CAMPUS
900 Highway 34 East
Detroit Lakes, MN 56501
218.846.3700
Fax: 218.846.3794

FERGUS FALLS CAMPUS
1414 College Way
Fergus Falls, MN 56537
218.736.1500
Fax: 218.736.1510

MOORHEAD CAMPUS
1900 28th Avenue South
Moorhead, MN 56560
218.299.6500
Fax: 218.299.6810

WADENA CAMPUS
405 SW Colfax Avenue
Wadena, MN 56482
218.631.7800
Fax: 218.631.7904

Learn more. Earn more. minnesota.edu

MINNESOTA STATE

Minnesota State Community and Technical College, a member of Minnesota State